

MECHANISMS OF CONTROL OVER COMPLIANCE
WITH INTERNATIONAL LAW FOR
THE PROTECTION OF
THE MEDITERRANEAN SEA AGAINST POLLUTION.

PhD THESIS

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ABSTRACT

This study is concerned with the legal mechanisms and institutional arrangements established to control compliance with commitments undertaken in treaty form by Mediterranean States, with a view at protecting the marine environment from various sources of pollution. Part I begins with a brief presentation of the state of the Mediterranean environment, both natural and socio-economic. There follows a consideration and assessment of the nature and extent of, and the relationship between, environmental obligations arising under the relevant instruments adopted at the global, regional and sub-regional level, in order to identify the implications thereof for the design and application of the said mechanisms and arrangements.

In Part II, the treatment of the core issue begins with an initial review of the evolution of compliance-control mechanisms under general international, and especially environmental, law, followed by a critical examination of the legal arrangements - actually or potentially - used in the Mediterranean to ensure compliance with the said body of law. In this context, a distinction is made between the traditional models, namely the state responsibility and civil liability approach to compliance control and the comprehensive institutional model, and the emerging approaches, namely provision of financial and technical assistance as compliance incentives, and compliance control and enforcement under national law.

Finally, this thesis argues that the most constructive way to encourage observance of international marine pollution standards in the region in the long term is through the intervention of international law towards developing appropriate procedural means for follow up and enforcement within domestic legal systems, while, in the short term, efforts should concentrate at establishing - or refining - comprehensive institutional mechanisms that would necessarily accommodate arrangements for financial and technical assistance dependent on effective compliance.

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ABBREVIATIONS

A.F.D.I.	Annuaire Français du Droit International
A.J.I.L.	American Journal of International Law
American Univ. J.of Int'l L. & Pol'y	American University Journal of International Law and Policy
Annual Rev. of Ener. & the Env.	Annual Review of Energy and the Environment
Austr.YB.I.L.	Australian Yearbook of International Law
Baylor L.Rev.	Baylor Law Review
BC	Barcelona Convention
B.I.S.D.	Basic Instruments and Selected Documents (GATT)
BOD	biochemical oxygen demand
BP/RAC	Blue Plan RAC
Boston Coll.Int'l & Comp.L.Rev.	Boston College international and Comparative Law Review
Boston Coll. Env'l Aff.L.Rev.	Boston College Environmental Affairs Law Review
CADA	Commission for Access to Administrative Documents (France)
Cal.W.I.L.J	California Western International Law Journal
CAMP	Mediterranean Coastal Areas Management Programme
Can YB.I.L.	Canadian Yearbook of International Law
Case West.Res.J.I.L.	Case Western Reserve Journal of International Law
C.de D.	Cahiers de Droit
CEDARE	Centre for Environment and Development for the Arab Region and Europe
CITES	Convention on International Trade in Endangered Species
CLC	Convention on Civil Liability for Oil Pollution Damage
C.L.R.	Commonwealth Law Reports
C.M.L.Rev.	Common Market Law Review
CO	carbon monoxide
CO ₂	carbon dioxide
COD	chemical oxygen demand
Colo.J.of Int'l Env'l L. & Pol'y	Colorado Journal of International Environmental Law and Policy

COLREG	Convention on the International Regulations for Preventing Collisions at Sea
Columbia J.of Trans'l L.	Columbia Journal of Transnational Law
COREPER	Committee of Permanent Representations (EU)
CORINE	Co-ordinated Information on the Environment Programme (EU)
Cornell I.L.J.	Cornell International Law Journal
CP/RAC	Cleaner Production RAC
CRAMRA	Convention on Regulation of Antarctic Mineral Resources
CSCE	Conference on Security and Co-operation in Europe
DDT	Dichlorodiphenyltrichloroethane
DG XI	Directorate-General Eleven (environment)
DYFAMED	Dynamique et Flux Atmosphériques en Méditerranée Occidentale (France)
EAGGF	European Agricultural Guidance and Guarantee Fund
EC	European Community
ECE	Economic Commission for Europe
ECJ	European Court of Justice
Ecology L.Q.	Ecology Law Quarterly
E.C.R.	European Court Reports
ECSC	European Coal and Steel Community
EEA	European Environment Agency
EEC	European Economic Communities
EEZ	Exclusive Economic Zone
EFTA	European Free Trade Area
EFZ	Exclusive Fishing Zone
EIA	environmental impact assessment
EIB	European Investment Bank
EIONET	European Environment Information and Observation Network
EIS	environmental impact study
ENVIREG	Programme for the Protection of the Environment and Promoting Economic Development (EU)
Env'l L.	Environmental Law
Env'l Liability	Environmental Liability
Env'l Politics	Environmental Politics
Env'l Pol. & L.	Environmental Law and Policy
EP	European Parliament

EPM	Environmental Program for the Mediterranean (World Bank/EIB)
ERDF	Regional Development Fund
ERS/RAC	Environment Remote Sensing RAC
ESC	Economic and Social Committee
ESF	European Social Fund
EU	European Union
Eur.Env'l L.Rev.	European Environmental Law Review
Eur.J.of Int'l.L.	European Journal of International Law
Eur.L.Rev	European Law Review
F.2d.	Federal Reporter, Second Series
FAO	Food and Agriculture Organisation
Fordham I.L.J.	Fordham International Law Journal
FSI	Flag State Implementation Sub-Committee (IMO)
GATT	General Agreement on Tariffs and Trade
GAW	Global Atmospheric Watch
GDP	gross domestic product
GEF	Global Environment Facility
GET	Global Environment Trust Fund
Georgia J. of Int'l & Comp.L.	Georgia Journal of International and Comparative Law
GESAMP	Group of Experts on Scientific Aspects of Marine Pollution
GFCM	General Fisheries Council for the Mediterranean
Ger.YB.I.L.	German Yearbook of International Law
GNP	gross national product
GRT	gross registered tonnage
Hague YB. of Int'l L.	Hague Yearbook of International Law
Harv.Env'l L.J.	Harvard Environmental Law Journal
Harv.Env'l L.Rev.	Harvard Environmental Law Review
Harv.I.L.J.	Harvard International Law Journal
Harv.L.Rev.	Harvard Law Review
HCH	hexachlorocyclohexane
Hellenic Rev. of Int'l Relations	Hellenic Review of International Relations
HNS	hazardous and noxious substances
IBRD	International Bank for Reconstruction and Development

I.C.L.Q.	International and Comparative Law Quarterly
ICSEM	International Commission for the Scientific Exploration of the Mediterranean Sea
I.E.L.-M.T.	W.E.Burhenne (ed.), <i>International Environmental Law - Multilateral Treaties</i> , London: Kluwer Law, 1974-1995.
I.J.E.C.L.	International Journal of Estuarine and Coastal Law
ILC	International Law Commission
I.L.M.	International Legal Materials
ILO	International Labour Organisation
IMDG Code	International Maritime Dangerous Goods Code
IMP	Integrated Mediterranean Programmes
IMPEL	Network for the Implementation and Enforcement of Environmental Law (EU)
Indiana J.of Global Leg.St.	Indiana Journal of Global Legal Studies
Int'l J.of Mar. & Coastal L.	International Journal of Marine and Coastal Law
IOC	International Oceanographic Commission
IOPC	International Oil Pollution Convention
IMO	International Maritime Organisation
Ital.YB.I.L.	Italian Yearbook of International Law
IUCN	International Union for the Conservation of Nature
J. of Energy & Nat.Res.L.	Journal of Energy and Natural Resources Law
J.of Env'l L.	Journal of Environmental Law
J. of Int'l Aff.	Journal of International Affairs
J.of Mar.L. & Com.	Journal of Maritime Law and Commerce
LC	London Convention (dumping)
LDC	London Dumping Convention
Leiden J.I.L.	Leiden Journal of International Law
LIFE	Financial Instrument for the Environment (EU)
Lloyd's Marit.& Com.L.Q.	Lloyd's Maritime and Commercial Law Quarterly
LOSC	Law of the Sea Convention
Maastricht J. of Eur. & Comp.L.	Maastricht Journal of European and Comparative Law
MAP	Mediterranean Action Plan
MARPOL	International Convention for the Prevention of Pollution from Ships

Mar.Pol.	Marine Policy
MAU	Mediterranean Assistance Unit for Combatting Accidental Marine Pollution
MEDA Regulation	Council Regulation 1488/96 on financial and technical measures to accompany the reform of economic and social structures in the framework of the Euro-Mediterranean partnership
MEDCITIES	Mediterranean Coastal Cities Network
MED POL	Co-ordinated Pollution Monitoring and Research Programme
MEDSPA	Programme of Action for the Protection of the Environment in the Mediterranean Region
MEDU/MAP	Mediterranean Co-ordinating Unit for MAP
MEPC	Marine Environment Protection Committee (IMO)
METAP	Mediterranean Environment Technical Assistance Program
Michigan J.I.L.	Michigan Journal of International Law
Missouri Env'l L. & Pol'y Rev.	Missouri Environmental Law and Policy Review
Moore Int'l Arb.Awards	Moore International Arbitral Awards
NAFTA	North American Free Trade Agreement
NATO	North Atlantic Treaty Organisation
Nat.Res. Lawyer	Natural Resources Lawyer
Nav.L.Rev.	Naval Law Review
Negot.J.	Negotiation Journal
Neth.I.L.Rev.	Netherlands International Law Review
Neth.YB.I.L.	Netherlands Yearbook of International Law
NGO	non-governmental organisation
NO _x	nitrogen oxides
N.S.W.L.R.	New South Wales Law Reports
NW J.of Int'l L.& Bus.	Northwestern Journal of International Law and Business
O.D.I.L.	Ocean Development and International Law
O.D.I.L.J.	Ocean Development and International Law Journal
OECD	Organisation for Economic Co-operation and Development
Oil & Gas L. & Taxation Rev.	Oil and Gas Law and Taxation Review
OILPOL	Convention on the Prevention of Pollution of the Sea by Oil
O.J.	Official Journal of the European Communities

OPRC	Convention on Oil Pollution Preparedness, Response and Co-operation
Oregon L.Rev.	Oregon Law Review
OTF	Ozone Projects Trust Fund
O.Z.O.R.	Österreichische Zeitschrift für öffentliches Recht und Völkerrecht
PAP/RAC	Priority Actions Programme RAC
Paris MOU	Paris Memorandum of Understanding on Port State Control
PCB	halogenated hydrocarbons
P.C.I.J.	Permanent Court of International Justice
PSCC	Port State Control Committee
RAC	Regional Activity Centre
RAMOGE	Agreement between Italy, France and Monaco Concerning the Protection of the Waters of the Mediterranean Shores
R.E.C.I.E.L.	Review of European Community and International Environmental Law
REMPEC	Regional Marine Pollution Emergency Response Centre
Rev.Inst.Eur.	Revista de Institutiones Europeas
R.G.D.I.P.	Revue Générale du Droit International Public
ROCC	Regional Oil-Combating Centre for the Mediterranean
RPSC	Regional Project Steering Committee
R.&S.	B.Rüster & B.Simma (eds.), <i>International Protection of the Environment: Treaties and Related Documents</i> , Dobbs Ferry, N.Y.: Oceana, 1975-1995
Rutgers Computer & Technology L.J.	Rutgers Computer and Technology Law Journal
San Diego L.Rev.	San Diego Law Review
Santa Clara L.Rev	Santa Clara Law Review
SIRENAC	Système d'Information relatif aux Navires Contrôlés (Paris MOU)
SMAP	Short and Medium-term Priority Environmental Action Programme
So _x	oxides of sulphur
SOLAS	International Convention for the Safety of Life at Sea
SPA/RAC	Specially Protected Areas RAC
Stanford J.of Int'l L.	Stanford Journal of International Law

St.Mary's L.J.	St.Mary's Law Journal
Syr.J. of Int'l L. & Com.	Syracuse Journal of International Law and Commerce
The Modern L.Rev.	The Modern Law Review
The Univ. of Queensland L.J.	The University of Queensland Law Journal
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNIDO	United Nations Industrial Development Programme
Univ.of Miami L.Rev.	University of Miami Law Review
Univ. of Richmond L.Rev.	University of Richmond Law Review
U.S.	United States Supreme Court Reports
Vanderbilt J.of Nat.Res.L.	Vanderbilt Journal of Natural Resources Law
Virginia J. of Int'l L.	Virginia Journal of International Law
Virginia J.of Nat.Res.L.	Virginia Journal of Natural Resources Law
VTS	vessel traffic services
WCED	World Commission on Environment and Development
WHO	World Health Organisation
W.L.R.	Weekly Law Reports
WMO	World Meteorological Organisation
WWF	World Wide Fund for Nature
Yale J.I.L.	Yale Journal of International Law
Yale L.J.	Yale Law Journal
YB.I.E.L.	Yearbook of International Environmental Law
YB.I.L.C.	Yearbook of International Law Commission
YB of Eur.L.	Yearbook of European Law
Z.A.Ö.R.V.	Zeitschrift für Ausländisches Öffentliches Recht und Völkerrecht

INTRODUCTION

The problem.

During the past three decades international environmental law has rapidly evolved primarily through international agreements and to a lesser extent by the slower, consensus-needing custom. Hence, today there is an ever-increasing number of environmental treaties regulating in detail a very broad spectrum of activities - often carried out exclusively within domestic jurisdictions -¹ that states contract into, but subsequently find difficult or undesirable to implement.

It is true that no state wants to look indifferent to fashionable environmental concerns, but this can sometimes be far from a genuine commitment. In addition to this volatile, subjective attitude, which implies no actual will or intention to comply, other more concrete reasons also lead to international environmental law often being left unfulfilled: lack of financial, institutional and human resources; differing interpretations as to the meaning of an obligation in view of the abundance of 'constructive ambiguities' found in environmental instruments; different and contradicting interests and policy priorities; distribution of powers within the state organisation, and the related lack of information and communication between different state agencies; inadequate analysis of what the treaty in question requires; and the dual role of states as lawmakers and law addressees.²

Moreover, one of the inherent features of public international law in general is the lack of strict enforcement mechanisms like the ones available within domestic legal orders, such as courts and police. Then, respect for international rules becomes a critical issue, as states have, in practice if not in theory, ample space to choose which ones to comply with and which not. This is aggravated in the area of international, Community, and national environmental regulation by the distinct lack of readily identifiable vested interests willing and able to secure enforcement thereof.³ This phenomenon has led to the suggestion that the greatest challenge for environmental regulation today is the problem of effective enforcement.⁴

It follows that the question of whether international law is actually observed becomes the central problem in the development of a system of environmental protection seeking to answer the threats of pollution and species' extinction satisfactorily. If this is not addressed, there is no point

¹ See *infra*, Chapter 2.

² See, among others, J.Ebbesson, *Compatibility of International and National Environmental Law*, 1996, pp.40-3.

³ See, among others, L.Krämer, *EEC Treaty and Environmental Law*, 1998, p.165.

⁴ See M.R.Anderson, 'Human Rights Approaches to Environmental protection: An Overview', in A.E.Boyle & M.R.Anderson (eds.), *Human Rights Approaches to Environmental Protection*, 1996, p.19.

in further developing substantive standards suffering from the same malfunctions as the existing ones. States - and other actors - will only find themselves more overwhelmed by a web of obligations, and possibly rights, that they will not know how to deal with. Even worse, 'dead letter' rules tend to lose the authority that keeps them standing as law. Then, one can expect an increasing number of disputes among states regarding the real content of international obligations and their performance with obvious destabilising consequences.

In this context, the significance of compliance with international environmental law has been increasingly appreciated during recent years, as the accumulated rules, conventions and standards have not always altered actors' behaviour and patterns of conducting business in more 'environmental' or 'sustainable' ways.⁵ It is characteristic that the Executive Director of UNEP did not hesitate, in 1985, while addressing the Fourth Ordinary Meeting of the Parties to the Barcelona Convention on the Protection of the Mediterranean sea against Pollution, to say that the elaborate structure of the Mediterranean Action Plan risks of being considered a facade, "as if in a shop everything was in the window and there was nothing to sell on the shelves inside".⁶ Growing attention on compliance has been also caused by recurring conflict over access to natural resources and the unfair economic advantage that states disregarding environmental obligations intertwined with economic interests are thought to gain over their competitors.⁷ Accordingly, in the June 1997 revision of the Rio Summit, it was again emphasised that "implementation of and compliance with commitments made under international treaties and other instruments in the field of the environment remain a priority".

It is, thus, not surprising that there is an ever-expanding body of legal literature and research on compliance with international environmental law.⁸ However, the only recent preoccupation of

⁵ For a celebrated example of a 'sleeping treaty', the 1979 Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), see S.Lyster, *International Wildlife Law: An Analysis of the International Treaties Concerned with the Conservation of Wildlife*, 1985, pp.278-304; and P.Birnie & A.E.Boyle, *International Law and the Environment*, 1992, pp.470-475.

⁶ UNEP, Report of the Fourth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols, UNEP/IG.56/5, 30 Sept.1985, Annex III, p.2.

⁷ See P.Sands, *Principles of International Environmental Law*, Vol. I, 1995, p.141.

⁸ See, among others, E.Brown Weiss & H.K.Jacobson (eds.), *Engaging Countries - Strengthening Compliance with International Environmental Accords*, 1998; R.Wolfrum, 'Means of Ensuring Compliance with and Enforcement of International Environmental Law', 272 *Receuil des Cours*, 1998, pp.9-154; D.G.Victor, K.Raustiala & E.B.Skolnikoff (eds.), *The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice*, 1998; J.Cameron, J.Werksman & P.Roderick (eds.), *Improving Compliance with International Environmental Law*, 1996; M.Bothe, 'The Evaluation of Enforcement Mechanisms in International Environmental Law - An Overview', in R.Wolfrum (ed.), *Enforcing Environmental Standards: Economic Mechanisms as Viable Means?*, 1996, p.13; A.Chayes & A.Handler Chayes, *The New Sovereignty - Compliance with International Regulatory Agreements*, 1995; W.Lang (ed.), *Sustainable Development and International Law*, 1995, Part Three; R.B.Mitchell, *Intentional Oil Pollution at Sea - Environmental Policy and Treaty Compliance*, 1994; A.E.Boyle, 'Saving the World? Implementation and Enforcement of International Environmental Law through International Institutions', 3(2) *J. of Env'l L.*, 1991, pp.229-45; P.Sands, 'Enforcing Environmental Security: The Challenge of Compliance with International Obligations', 46(2) *J. of Int'l Aff.*, 1993, pp.367-90; J.H.Ausubel, & D.G.Victor, 'Verification of International Environmental Agreements', 17 *Annual Rev. of Ener. & the Env.*, 1992, pp.1-43; T.Marauhn, 'Towards a Procedural Law of Compliance Control in International

(continued...)

international environmental lawyers with compliance issues has not allowed a uniform and consistent systematisation to emerge. Even terminology is sometimes confusing, as compliance, enforcement, implementation and effectiveness are notions closely related, with no clear-cut borderlines. For present purposes, compliance means an actor's behaviour in conformity with a legal commitment it has undertaken, and more specifically a country's adherence to the provisions of an international environmental agreement by which it is bound;⁹ implementation refers to all the concrete measures that give practical effect to an undertaking and ensure its actual fulfilment; enforcement relates to any action undertaken in response to a violation of a legal obligation; while effectiveness, depending on the context, generally means that the objective aimed at by the establishment of a legal norm or procedure is achieved.

Having said that, one must always bear in mind that non-compliance has many faces. It can involve action or inaction depending on the content of the substantive rule; failure to carry out procedural obligations, secondary in relation to the primary rule; partial performance; failure to enforce implementing legislation; and many more. In actual practice, it is not always straightforward whether one is faced with a case of non-compliance, which makes organisation of the issue in abstract terms a difficult task.

The case of the Mediterranean Sea.

This study is not concerned with compliance with international environmental law as an abstract notion. It rather examines the established and emerging mechanisms to control compliance in a specific context, in the field of conventional international law on the protection of the Mediterranean Sea from pollution. This marine region is bordered by three continents and twenty-two states belonging to a multiplicity of legal cultures, international organisations and groupings.¹⁰ Hence, international law applicable here is complex and vast. Even in the more restricted field of international environmental law, the same pattern is prevalent: The general global rules for the protection of the marine environment and its resources are applicable, sometimes imposing stricter

⁸(...continued)

Environmental Relations', 56(3) *Z.A.Ö.R.V.*, 1996, pp.696-731; K.Sachariew, 'Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms', 2 *Y.B.I.E.L.*, 1991, pp.31-52; D.G.Victor, 'The Montreal Protocol's Non-Compliance Procedure: Lessons for Making Other International Environmental Regimes More Effective', in W.Lang (ed.), *The Ozone Treaties and their Influence on the Building of International Environmental Regimes*, 1996, pp.58-81.

⁹ See Wolfrum, *op.cit.* n.8, p.29; Brown Weiss & Jacobson, *op.cit.* n.8, p.39-40; E.Brown Weiss, 'Understanding Compliance with International Environmental Agreements: The Baker's Dozen Myths', 32 *Univ.of Richmond L.Rev.*, 1999, pp.1563-6; and Victor *et al.*, *op.cit.* n.8, p.7 and fn.13. This is admittedly a simplification of the complex concept of 'compliance', see B.Kingsbury, 'The Concept of Compliance as a Function of Competing Conceptions of International Law', 19 *Michigan J.L.L.*, 1998, pp.345-72.

¹⁰ Namely, Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Morocco, Slovenia, Spain, Syria, Tunisia, Turkey, the West Bank and Gaza Strip, and Yugoslavia.

standards for sensitive seas like the Mediterranean, along with the specific, regional rules, i.e. the Mediterranean Action Plan (MAP) system, developed within the Regional Seas Programme under the auspices of UNEP, and sub-regional or multilateral agreements providing for more localised circumstances. Furthermore, co-operation on the continental level has resulted in the establishment of policies and law, the European Union being the principal and more sophisticated, with regard to the protection of the marine environment.

One could reasonably expect an improvement in the quality of the Mediterranean waters as a result of all these efforts. However, this is not the case. As will be shown in Chapter 1, all scientific reports indicate an increase in many of the pressures on the marine environment, and scenarios for the year 2025 indicate that the state of the environment will deteriorate considerably.

Consequently, and although effectiveness of an international regime and compliance with the relevant sets of legal standards are - as already noted - not to be confused or used interchangeably, deficient compliance with international environmental law in the region can reasonably be taken as a given in this study. This situation, as well as the participation of both developed and developing states, and the EU in the international regimes involved, make a study on compliance control very relevant and worthwhile.¹¹ Twenty years of regional co-operation is a period long enough to allow fairly safe conclusions to be drawn in relation to the inefficiencies and malfunctions of the legal regimes involved, and to assess whether these are structural so that different institutions are needed or simply functional and thus able to be solved by adopting different techniques within the existing framework.

Legal literature on the Mediterranean is fairly extensive.¹² The fact that throughout history this sea was the theatre of important events, as it is bordered by some of the principal actors of international politics at the crossroads between Europe, Africa and Asia, explains the general preoccupation with international law applicable here. In the field of environmental protection, MAP has been the first and widely regarded as the most successful initiative launched by UNEP's ambitious Regional Seas Programme in 1975. Since then, there have been numerous analyses of the evolving regime, with new impetus every time a protocol was added.¹³ These writings, although

¹¹ See Brown Weiss & Jacobson, *op.cit.* n.8, for another multiannual research programme that made a similar choice of states to be studied.

¹² See, among others, S.C.Truver, *The Strait of Gibraltar and the Mediterranean*, 1980; U.Leanza (ed.), *The International Legal Regime of the Mediterranean Sea*, 1987; U.Leanza, & L.Sico (eds.), *Zona Economica Exclusiva e Mare Mediterraneo*, 1989; Mediterranean Institute, *The Mediterranean in the New Law of the Sea*, 1991; A.Ahish, *The International Law of Maritime Boundaries and the Practice of States in the Mediterranean Sea*, 1993; and W.D.Burnett, 'Mediterranean Mare Clausum in the year 2000?: An International Law Analysis of Peacetime Military Navigation in the Mediterranean', 34 *Naval L.Rev.*, 1985, pp.75-155.

¹³ See, e.g., Lord Ritchie-Calder, *The Pollution of the Mediterranean Sea*, 1972; P.Sand, Drafting of Regional Legal Instruments for Marine Environmental Protection: The Case of the Mediterranean, Doc.UNEP/TF LIRS/Inf.4, UNEP, November 1976; D.de Hoyos, 'The United Nations Environment Program: The Mediterranean Conferences', 17 *Harv.I.L.J.*, 1976, pp.639-46; B.de Yturriaga, 'Convenio de Barcelona de 1976 para la Protección del Mar Mediterraneo (continued...)

valuable for their insight into the real meaning and evolution of the law, they have, however, rarely concentrated on its actual implementation.¹⁴

The thesis.

The present study will, therefore, focus on evaluating the operation of legal mechanisms and institutional arrangements in place, the means used to facilitate and ensure compliance with international law on the protection of the Mediterranean sea against pollution. The ensuing discussion will demonstrate the weaknesses and allow conclusions to be drawn on the corrective action needed to ensure better realisation of the existing international environmental rules in the region.

In other words, the aim of research conducted was not to develop a general theory on compliance, not even to resolve questions on the relationship between different approaches to compliance control, such as state responsibility, non-compliance procedures etc.¹⁵ It was rather to closely examine the actual practice with regard to compliance control as it has occurred to date and consider possible developments in the future. This exercise is naturally based on the work and findings of other researchers that have been preoccupied with more general issues or even formulated a theory on compliance control in international environmental law.¹⁶

It should also be said from the start that the present thesis does not put forward a unitary model of compliance control in the Mediterranean for the future. Such a model, although desirable, does not find support in any of the findings discussed throughout subsequent Chapters. More generally, each treaty system has in principle and in fact its own dynamic, and it is submitted that

¹³(...continued)

contra la Contaminación', 2(1) *Rev.Inst.Eur.*, 1976, pp.63-96; L.Saliba, 'Protecting the Mediterranean - Co-ordinating Regional Action', 2 *Mar.Pol.*, 1978, pp.171-80; L.Juda, 'The Regional Effort to Control Pollution in the Mediterranean Sea', 5 *Ocean Management*, 1979, pp.125-50; B.Boxer, 'The Mediterranean Sea: Preparing and Implementing a Regional Action Plan', in D.Kay and H.Jacobson (eds.), *Environmental Protection - The International Protection, The International Dimension*, 1983; S.Kuwabara, *The Legal Regime of the Protection of the Mediterranean Sea against Pollution from Land-Based Sources*, 1984; E.Raftopoulos, *The Mediterranean Action Plan in a Functional Perspective: A Quest for Law and Policy*, *MAP Technical Report Series No.25*, 1988; I.Musu, *The Interdependence between Environment and Development: Marine Pollution in the Mediterranean Sea*, 1991; A.Chircop, 'The Mediterranean Sea and the Quest for Sustainable Development', 23(1) *O.D.I.L.*, 1992, pp.17-30; and E.Raftopoulos, *The Barcelona Convention and Protocols: The Mediterranean Action Plan Regime*, 1993. See also some of the theory-oriented Francophone literature, e.g., M.Dejeant-Pons, *La Protection et le Développement du Bassin Méditerranéen*, 1987; M.Dejeant-Pons, *La Deuxième Décennie du Plan d'Action pour la Méditerranée*, 1987; J.-Y.Cherot & A.Roux, *Droit Méditerranéen de l'Environnement*, 1988; M.Dejeant-Pons, *La Méditerranée en Droit International de l'Environnement*, 1990.

¹⁴ For instance, a very thorough study of the MAP system and its implementation by Peter Haas, is primarily concerned with the evolution and systematic analysis of the co-operation in the region from an international political science standpoint, see P.Haas, *Saving the Mediterranean - The Politics of International Environmental Co-operation*, 1990.

¹⁵ See *infra*, Chapter 4, p.148; and Chapter 5, p.222.

¹⁶ Especially those listed *supra*, in fn.8.

there is no universal non-compliance model that can be applied to all international environmental regimes.

There are basically two broad approaches to the problem that can be used separately or in combination in each international environmental regime, the 'managerial' and the 'enforcement' approach.¹⁷ Put differently, one may choose to give incentives having the potential to change behaviour in the desired manner or follow a stronger, more 'judicial' path and attempt to enforce the law against the delinquent actor, what is called in international law jargon 'carrots and sticks' approach. Now, the effort both in theory and in practice of international law has traditionally concentrated on how to improve *quasi* judicial or policing systems. In fact, the traditional school of thought attributes major significance to the role of punitive sanctions that validate international law as a genuine legal order.¹⁸ The 'policeman' approach to compliance problems¹⁹, initially perceived as suitable for the enforcement of disarmament and non-use-of-force related obligations, went some way in creating a stronger international response mechanism. However, coercive enforcement mechanisms are on the decline, and "international law displays an increasing disparity between its growing normative content and its lack of enforcement mechanisms",²⁰ as it remains a system based on compliance rather than enforcement.²¹

What is more, if such a response could be legitimate or even effective in some vital areas of international law, it hardly seems fit in the environmental context. International environmental law has emerged and can flourish in an atmosphere of co-operation, not crude coercion, as it has a bearing on development issues and involves mainly the day-to-day conducting of business within national boundaries. It follows that 'softer', consensus-building, non-adversarial alternatives should be devised, of a sort that would encourage respect for environmental standards, prove their cost-effectiveness and reconcile them with development policies, especially in less affluent countries. The dominant underlying principle that attributes great significance to these options lies in the nature itself of protected assets and of the respective obligations. In the environmental sphere, regimes aim at preventing harm, i.e. pollution or overexploitation, before it occurs, as restoration is often impossible or uneconomical. The emphasis is then placed not on reparation but on

¹⁷ See *infra*, Chapter 3, pp.124 and 132.

¹⁸ For a succinct summary of the traditionalist positions see, among others, A.L.Springer, *The International Law of Pollution: Protecting the Global Environment in a World of Sovereign States*, 1983, pp.34-5. Some proponents of this school focussing on dispute settlement issues have produced valuable work for international environmental law, see e.g. R.Bilder, 'The Settlement of Disputes in the Field of the International Law of the Environment', *Receuil des Cours*, 1975(1), pp.139-239; and A.L.Levin, *Protecting the Human Environment: Procedures and Principles for Preventing and Resolving International Controversies*, 1977.

¹⁹ See C.Clark & L.Sohn, *World Peace through World Law*, 1960, for an exposition of this notion in respect with arms and violence.

²⁰ B.Conforti, *International Law and the Role of Domestic Legal Systems*, 1993, p.7.

²¹ See M.E.O'Connell, 'Enforcement and the Success of International Environmental Law', 3(1) *Indiana J. of Global Leg.Stud.*, 1995, p.52.

prevention. Thus, international enforcement, at least in its traditional form, can provide only an *ex post* answer, and thus loses much of its appeal and effectiveness. The need for enforcement of international environmental rules, when it arises, can be arguably more convincingly pursued under the national law of the parties to the respective regime.

In this general context, the present thesis draws a distinction between the long-established traditional models of compliance control, namely the state responsibility and civil liability approach, and the comprehensive institutional model, which at least in the case of the MAP system does not include any distinct compliance control mechanism; and the emerging approaches, namely provision of financial and technical assistance as compliance incentives, and compliance control and enforcement under national law. It is submitted that the most promising ways to encourage observance of international marine pollution law in the Mediterranean is, on one hand, through the establishment, in close co-operation with the MAP institutions, of arrangements for financial and technical assistance conditioned on the fulfilment of international environmental requirements at the regional level; and, on the other, through resort to administrative and judicial proceedings in national legal orders with international law setting minimum procedural standards. This would, in fact, be a new version of the “carrots and sticks” paradigm: Adequate incentives for compliance will be forthcoming, but if they make no difference, then non-state actors, i.e. concerned citizens and their associations speaking for the common interest, will use the national legal machinery to seek redress for both public and private activities that impair the environment.

Standpoints - Sources - What is excluded.

It is probably obvious by now that although this work is legal, it cannot help taking into account extra-legal considerations that help reveal and interpret tensions and underlying causes of different phenomena; the pronounced political character of international law cannot be set aside. Actually, political scientists were concerned with non-compliance before lawyers were. The ‘realists’ among them have claimed that law and institutions ‘don’t matter’, and some lawyers have even held that international law is not positive law at all, since it is not backed by a definite authority able to use force in case of a breach.²² While acknowledging these views, this thesis will not pursue them further. On the contrary, it is based on the presumption that international law, in the environmental field, exists by way of positive, mainly conventional, undertakings enjoying different degrees of respect and affecting more or less both state and individual behaviour. Moreover, although the content of the law and the needs it addresses are essential in inducing compliance, institutions and procedures designed to encourage and facilitate or, as a last resort, force compliance

²² See H.Kelsen, *Principles of International Law*, 1952; and F.A.Boyle, ‘The Irrelevance of International Law: The Schism between International Law and International Politics’, 10 *Cal.W.I.L.J.*, 1980, p.193-219.

with the rules and increase transparency within a regime play their role as well and can certainly be further developed. In real life, despite academic rows and theoretical constructions,

“(g)overnment diplomats and international lawyers spend considerable resources drafting and redrafting treaties to resolve international environmental problems. Environmental groups commonly support these efforts, pressing governments to negotiate more new, and strengthen and refine existing, environmental treaties. Business groups regularly oppose provisions of environmental treaties as excessively costly and burdensome. Policy analysts and pundits regularly highlight the problems with existing treaties and propose new treaty provisions to address them.”²³

As much of the discussion concerns the actual practice rather than the abstract law, effort will be made to draw on material shedding light on the administrative and judicial practice of indicative Mediterranean states and concerned actors. The dynamic system approach dictates a broad perception of who these are.²⁴ In that vein, interest groups’ activities to the degree that they exercise influence, are not considered in advance less important than governmental action.²⁵ Official, academic and informal sources have been evaluated accordingly and the records of the regional international institutions have been examined thoroughly. Finally, personal ideas and evaluations from people involved with the application of international law in the Mediterranean context have been sought. Special reference should be made at this point to the use of Greek jurisprudence to illustrate certain points in Chapters 7 and 8. This was due to the author’s thorough knowledge of the Greek legal system and the ensuing possibility to access relevant material and understand its implications. Such extended reference to other national legal systems, although desirable, was not feasible. Moreover, it would really be beyond the scope of this study, in view of the fact that the Greek case studies serve only as examples, and do not purport to be representative nor susceptible to generalisations.

It should also be noted that customary law or informal ‘soft law’ instruments, voluntary agreements etc. are excluded from the scope of this study for several reasons, the main being the fact that international environmental law has evolved principally through treaty-making which serves to formulate more concrete and technical obligations; in addition, treaty regimes offer the possibility for *ad hoc* arrangements to control compliance. Furthermore, the conventional law examined is concerned with marine pollution, i.e. the detrimental alteration of quality of the marine environment, and does not include conservation of species, notwithstanding difficulties in defining pollution in exact terms or clearly distinguishing the latter from harm to marine ecosystems, endangered species

²³ R.B.Mitchell, ‘Compliance Theory: a Synthesis’, in J.Cameron, J.Werksman & P.Roderick (eds.), *Improving Compliance with International Environmental Law*, 1996, p.2.

²⁴ See A.Kiss & D.Shelton, ‘Systems Analysis of International Law: A Methodological Inquiry’, XVII *Neth.Y.B.I.L.*, 1986, p.45.

²⁵ On the increasingly important role of NGOs in the formation and implementation of international environmental law, see K.Raustiala, ‘The “Participatory Revolution” in International Environmental Law’, 21 *Harv.Env’t L.Rev.*, 1997, pp.537-86.

and other forms of marine life.²⁶ In fact, the most recent trend in the Mediterranean area in particular is to encompass marine pollution under the heading of sustainable development of the seas and coastal areas;²⁷ hence the only justification for the limited scope of this study is the need to make its subject more manageable.

Outline.

Finally, a brief description of the thesis' structure is as follows:

Part I will set the stage with an initial presentation in Chapter 1 of the Mediterranean realities, both in terms of physical environment, pollution loads and special problems, but also of the socio-political and economic conditions prevalent. Chapter 2 classifies the main conventional obligations aiming at protecting the Mediterranean marine environment from various sources of pollution into broad categories, explores their nature and extent, and briefly examines the hierarchy between them. This is necessary in view of the focus of the present work which lies, as already explained, not in compliance control as an abstract notion, but in a study of a specific area of international environmental regulation, marine pollution in the Mediterranean region, and the related procedures to control compliance. Thus, information on the Mediterranean Sea, the states involved and their political and economic relations, as well as the substance of the standards to be observed, becomes relevant and indispensable.

In Part II, the discussion turns to the pith of compliance issues: Chapter 3 provides a general account of the evolution of compliance control mechanisms in international environmental law and identifies the different - established and emerging - approaches, building on existing literature concerning compliance control.

The following Chapters expand on this initial categorisation. Chapter 4 briefly examines the traditional notions of state responsibility and of civil liability as means to redress non-compliance, and concludes that the former's relevance in the specific context is very limited, while the latter can only be a useful tool if further developed as one set of minimum procedural standards such as those discussed in Chapter 8. Moreover, it is submitted that some of the basic concepts articulated in the state responsibility context have been transformed and adapted to the particular needs of international environmental law, and have been accommodated in the most widely-used arrangements for compliance control, i.e. the institutional follow-up carried out within each environmental regime. Chapter 5, hence, discusses the so-called 'comprehensive institutional approach', and the related 'non-compliance procedures' and the EU model of compliance control. It concludes that this model, although more relevant than the previous one, is again underutilised

²⁶ See generally, Springer, *op.cit.* n.18, Chapter 3.

²⁷ See *infra*, Chapter 2, p.58.

in the environmental regimes examined, with the notable exception of Community law that controls compliance of its Member States in a much more effective way. Another significant finding is the importance of economic and financial incentives and sanctions when linked with environmental compliance in the Community system and the 'non-compliance procedures'. Therefore, Chapter 6 looks into the financial and technical incentives and assistance as tools for compliance control with regard to environmental norms in the framework of MAP, the EU, the World Bank, EIB, and GEF, and puts forward the first part of the thesis, namely that there is much scope for developing effective compliance control tools by linking economic assistance, or reversely penalties, to compliance with international environmental standards, in the Community, as well as in the MAP system.

In Chapter 7, the focus shifts from purely international compliance control mechanisms to national legal systems. It addresses national implementation of environmental obligations and compliance control and enforcement under national law, and puts forward the thesis that national legal machinery is most appropriate level to accommodate concerned citizens and NGOs seeking to control compliance with and enforce international environmental standards in the Mediterranean. Finally, Chapter 8 considers the existing and potential contribution of international law to the effectiveness of the above model, by examining a series of procedural rights set by international law and operating within national legal orders, which are crucial in that they empower individuals and NGOs to pursue compliance control and enforcement more successfully.

PART I

THE FACTUAL AND LEGAL CONTEXT

CHAPTER 1.

THE MEDITERRANEAN SEA AND ITS PEOPLE.

“Thus you make a model of the Mediterranean Sea... In this model let the rivers be commensurate with the size and outlines of the sea. Then by experimental observations of the streams of water, you will learn what they carry away of things covered and not covered by water. And you will let the waters of the Nile, Don and Po and other rivers of that size flow into the sea, which will have its outlet through the straits of Gibraltar... In this way you will soon see whence the water currents take objects and where they deposit them.” (Leonardo da Vinci, *circa* 1500 AD)¹

The first Chapter of this study provides the background information that will enable the reader to better follow the ensuing discussion on the mechanisms of control over compliance with international norms for the protection of the Mediterranean Sea against pollution. In particular, it summarises the physical characteristics and the socio- and geo-political parameters that shape the particular character of the region, i.e. the overall context in which Mediterranean states co-exist and co-operate to conclude and implement binding international agreements that address common environmental problems. In the last section, the patterns of economic activity in the basin that result in certain significant environmental pressures, as well as the relevant trends for the twenty-first century, are also reviewed, in order to assess the major pollution problems; this will make possible the identification, in the next Chapter, of the international legal standards that are more urgently in need of proper follow-up.

1.1. Physical Aspects.

The Mediterranean has probably been the first sea to be explored,² and is one of the most studied ocean regions, especially during the second half of the twentieth century when technical progress facilitated a great accumulation of knowledge. That is not to say that data is uniform and unequivocal, however. Indeed, large areas, such as open waters or the deep seabed, are under-explored with very little information available on them. The following presentation will, consequently, be based on these scientific findings most widely accepted in the Mediterranean

¹ Cited in S.C.Truver, *The Strait of Gibraltar and the Mediterranean*, 1980, p.13.

² Since it was in Egypt that history records the beginning of sailing around the year 2650BC, see L.Casson, *The Ancient Mariners: Seafarers and Seafighters of the Mediterranean in Ancient Times*, 1959, p.4.

community as authoritative, either because they have been repeatedly documented and tested or due to the respect enjoyed by the author or body responsible for them.

The Mediterranean is a semi-enclosed sea lying between Europe, Asia and Africa and covering an area of 2.5 million km². Although considered small compared to other ocean basins, the Mediterranean is quite long (3,800km from Gibraltar to Syria) and narrow (maximum distance in the North-South direction, from France to Algeria, about 900km).³ The average depth is about 1.5km, and the total water volume 3.7 million km³. The many islands and complex seaboard create a total length of 20,000km of coastline. It consists of a series of interacting parts and adjacent seas: There are two major basins, the Western and the Eastern separated by the shallow submarine ridges of Sicily - Tunisia and of Messina. The Western basin is divided into the Alboran Sea, the Algero-Provencal basin, the Ligurian (the last two often divided differently, i.e. in Northwestern and Southwestern basins) and the Tyrrhenian Seas, whereas the Eastern basin comprises the Adriatic, Ionian, Central, Aegean and Levantine Seas.

The Mediterranean is connected to the Red Sea by the Suez Canal; to the Sea of Marmara, Bosphorus and the Black Sea by the Dardanelles; and to the Atlantic by the only natural oceanic connection, the Strait of Gibraltar.⁴ It is, thus, a virtually enclosed sea with small drainage basins, marine basins of considerable maximum depth, a great number of large and small islands, intense seismic and volcanic activity, a much damped tidal regime, and a specific wind regime.⁵ Moreover, the young relief and the contact between the sea and the mountains signifies few large plains, little good agricultural land, few broad fluvial basins (the Ebro, Rhone and Po in the North and the Nile in the South) and ports and harbours closely hemmed in between sea and rock.⁶

On the whole, the region is situated in the semi-arid zone, characterised by hot, dry summers and mild, damp winters.⁷ It follows that the Mediterranean Sea has a deficient hydrological balance,⁸ being what is called a "concentration basin", constantly lower than the Atlantic,⁹ which results in a continuous flow of Atlantic surface waters through the Strait of

³ L.Jeftic *et al*, State of the Marine Environment in the Mediterranean Region, *UNEP Regional Seas Reports and Studies*, No.132, UNEP, 1990; *MAP Technical Report Series*, No.28, UNEP, Athens, 1989, p.1

⁴ See *id.*; and Truver, *op.cit.* n.1, pp. 14-15.

⁵ Winds generally blow from the North and East through gaps in the mountain ranges, see UNEP, The State of the Marine and Coastal Environment in the Mediterranean Region, *MAP Technical Reports Series*, No.100, UNEP, Athens, 1996, p.4; and M.Grenon & M.Batisse (eds.), *Futures for the Mediterranean Basin: the Blue Plan*, 1989, p.1.

⁶ See Jeftic *et al*, *op.cit.* n.3; and Grenon & Batisse (eds.), *op.cit.* n.5, pp.1-2.

⁷ However, there are considerable variations in rainfall in the region decreasing from Northwest to Southeast (from 450cm/annum near the Dalmatian coast to 2cm in the Sahara), while torrential rain is responsible for considerable soil erosion in the South, see Jeftic *et al*, *op.cit.* n.3, p.2; Truver, *op.cit.* n.1, p.27; and Grenon & Batisse (eds.), *op.cit.* n.5.

⁸ The Adriatic is a notable exception due to the Po and other rivers' inflow, see S.Kuwabara, *The Legal Regime of the Protection of the Mediterranean Sea against Pollution from Land-Based Sources*, 1984, p.169.

⁹ Sea level decreases progressively from Gibraltar towards the North Aegean, with maximum differences of about 80cm, see Jeftic *et al*, *op.cit.* n.3, p.3.

Gibraltar.¹⁰ The main volume of these easterly currents travels along the coast of North Africa - mainly due to thermocline forces, wind stress and atmospheric pressure distribution - finally reaching the Levantine basin, and constitutes the most constant component of the Mediterranean circulation pattern.¹¹ This process creates significant risks of transboundary pollution as the surface water carries along and spreads throughout the basins suspended industrial and urban pollutants, especially in the Balearic Deep Water formed near the mouth of the Rhone river, and the Adriatic waters loaded with effluents from Po. Yet, the exact movements of these bodies of water are not well known, which means that the size and impact of the pollution transportation is still very unclear.¹²

The estimated renewal time for Mediterranean waters is generally considered to be 80 years.¹³ This is a relatively short period compared with other semi-enclosed seas, such as the Baltic (2500 years) or the Black Sea. However, new data show that different types of water - surface, intermediate or bottom - require different periods for their renewal; hence, some of the water that finds its way into the basin's depths may take 100 to 300 years to return to the Atlantic, while some of it may exit in only a few decades.¹⁴ It is equally possible that some water never quite exits the Mediterranean as the intricate coastline and the abundance of islands create many more complex local currents forming small and big gyres where waters - and pollutants - get trapped in an ever-going circular movement.¹⁵ On the other hand, coastal waters do not appear to be greatly influenced by these general flow patterns, as movement here is mainly caused by wind stress and the corresponding waves and eddies with great seasonal or local variations; hence, pollutants disposed of near the coast cannot be sufficiently diluted and dispersed.¹⁶

Mediterranean ecosystems are highly compartmentalised and the biodiversity is exceptional. The ecosystems of the region are particularly threatened due to drainage or introduction of fish in wetlands; destruction of the *maquis*; fires or over-exploitation of the Mediterranean forest - arguably the most degraded by human action in the world causing disturbances in the water-cycle and soil erosion -; effects of pesticides and fertilizers etc. In fact, a number of animal species have suffered or are close to extinction.¹⁷ Although solar energy is

¹⁰ As exchange with the Red Sea through the Suez canal or with the Black Sea is minimal.

¹¹ See Jelić *et al*, *op.cit.* n.3, p.3; and Truver, *op.cit.* n.1, p.27-8.

¹² See Truver, *op.cit.* n.1, pp.35-6.

¹³ See *ibid*, p.28.

¹⁴ See UNEP, *op.cit.* n.5, p.6.

¹⁵ See A.E.Chircop, 'The Mediterranean Sea and the Quest for Sustainable Development', 23(1) *O.D.I.L.*, 1992, p.27.

¹⁶ See Kuwabara, *op.cit.* n.8, p.3.

¹⁷ Including large forest animals such as the bear, wolf, lynx, and antelope; large birds of prey, such as eagles and vultures; but also other birds, because of unrestricted hunting, despite the fact that the whole area, and especially the narrow straits between the northern and southern shores, is a major migration route between Europe and Africa, see Grenon & Batisse (eds.), *op.cit.* n.5, pp.7-9

abundant, the Mediterranean Sea as such is relatively poor in terms of quantity.¹⁸ The reasons for that are mainly the diversity of the basins; the low productivity of the waters due to the low level of organic matter - mainly phytoplankton -; the great average depth; and the limited surface area of continental shelves.¹⁹ The Mediterranean marine mammals, which principally comprise cetaceans, such as dolphins and whales, and pinnipeds (seals) are particularly vulnerable,²⁰ as it is estimated that they are all currently threatened,²¹ and some, like the monk seal (*Monachus Monachus*) are considered directly or indirectly endangered by accidental and commercial catches, systematic extermination, decreasing food supplies, fatal indigestion of non-degradable products (plastic, aluminium etc), and, finally, pollution. In fact, small Mediterranean cetaceans are among the species showing the highest concentration of pollutants affecting their reproductive capacity, in view of the fact that because of their low reproduction rate, they cannot respond rapidly to environmental changes. During the 90s there have been notable efforts to preserve and protect them and an increased awareness that their extinction would surely bring about serious imbalances in the marine ecosystem of the region as a whole.

1.2. Socio- and Geo-Political Aspects.

Turning now to the people living around this complex water body, one cannot help noticing the weight of past and more recent history on their present life and activities. It is well-known that the distant past has witnessed the establishment, flourishing and decline of many of the world's major civilisations in the Mediterranean region, including the Egyptian, Minoan, Phoenician, Greek, Roman, Arab, and Ottoman, some of them notably based on empire. Christianity, Judaism and Islam have also emerged from here. Studying this extraordinary sequence, Fernand Braudel has drawn attention to the paradox of Mediterranean peoples: Recorded history reveals an astonishing

¹⁸ In terms of diversity, on the other hand, it is very rich, with some 900 species of fish, a lot of which are endemic.

¹⁹ See Grenon & Batisse (eds.), *op.cit.* n.5, pp.9-10.

²⁰ Twenty two cetacean species have been recorded (77 species worldwide) in the region, the Black Sea included, nine of which are rare. As a matter of fact, information on their populations and biology has started being gathered comparatively recently - in the early 70s. Hence, a lot of crucial data is still lacking; for instance, mass mortality of dolphins observed during the 80s and early 90s - reaching a peak of many thousands in 1990 - has been attributed to viruses, but, as yet, there are only speculations about the connection of decreased resistance to infections with pollution, although high concentrations of pollutants, like PCBs, heavy metals etc. were traced on dead animals, see 'Mass Mortalities of Mediterranean Dolphins', *MedWaves*, No.24, Winter 1991/92, p.7; P.-C. Beaubrun, 'What we Know about Mediterranean Cetaceans', *MedWaves*, No.26, Summer/Fall 1992, p.21; and UNEP, *op.cit.* n.5, p.68.

²¹ See UNEP/IUCN, Technical Report on the State of Cetaceans in the Mediterranean, *MAP Technical Reports Series*, No.82, Athens, 1994.

stability, yet also extraordinary mobility, shifts and movement.²² This contradiction explains why so much ink has been shed on whether a "Mediterranean identity" exists or not.²³

One can, indeed, point to certain socio-cultural features that are common to or largely shared by the coastal populations, despite important disparities in history, language and religion. Thus, for thousands of years, Mediterranean civilizations have grown in a number of urban sites. A network of towns and villages emerged very early on, and the Mediterranean landscape developed around it, and received its animation and life from it. The current network, apart from a few exceptions, is the direct inheritance of two to three thousand years ago, and particularly of the Roman Empire. Residential densities are quite high, especially in the Islamic towns South and East of the basin, and in the centres inherited directly from the Middle Ages. Problems, such as water supply, are also common and predominant.²⁴

Moreover, Mediterranean civilizations have elaborated the philosophical concepts which have made possible the apparent mastery of man over nature. In the Blue Plan studies,²⁵ such a "common stock" of behaviour, with deep cultural and religious roots in the Mediterranean, was identified and taken into account together with the modern tensions that come with industrialisation:

"Thus, agriculture and farming practices have over the centuries made sparing use of land, soil, water, and the countryside. Land-tenure patterns differ from one country to another, but have common features... Attitudes concerning nature reflect the very old "anthropization" of nature, which Mediterranean people over the centuries have been more inclined or more prompted to tame rather than to protect.

The contemporary cultural environment is destabilized by the massive intrusion of a rootless urban life-style and the arrival of the communication and consumer society, either through the influence of tourists or the of foreign audio-visual productions. The media carry issues which have virtually no base in the local environment. They bombard local populations with references more related to the industrialized West than to the Mediterranean reality. A huge task of active instruction is required so that in the future adults and young people will understand the issues, risks, and also the renewal patterns which still provide the Mediterranean world with its values and individuality, even if new kinds of collective behaviour are added to the changing ones of the past."²⁶

²² F.Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, 1992.

²³ On the unity of the Mediterranean culture, see, *inter alia*, J.G.Peristiany (ed.), *Honor and Shame: The Values of Mediterranean Society*, 1965; J.Davis, *People of the Mediterranean*, 1977; J.Goody, *The Development of the Family and Marriage in Europe*, 1983; and D.D.Gilmore (ed.), *Honor and Shame and the Unity of the Mediterranean*, 1987. For the contrary view, M.Herzfeld, 'Honor and Shame: Problems in the Comparative Analysis of Moral Systems', 15 *Man*, 1980, pp.339-351.

²⁴ See Grenon & Batisse (eds.), *op.cit.* n.5, p.12.

²⁵ The study-oriented 'Blue Plan' programme, initiated in 1979 as one of the first activities of the Mediterranean Action Plan (MAP), calls for systematic surveys of major development and environmental protection activities and for the development of alternative development policies based on the findings of the surveys; for the results of Phase I of this project, see *ibid.*

²⁶ *Ibid.*, pp.12-13.

Having said that, the collapse of the Roman Empire in the western part of the Sea laid the ground for the basic, continuing division into an Eastern Mediterranean essentially Slav, Greek and Turkish, the Arabic Southeastern and Southern shores, and the Latin West. Consequently, the Mediterranean should be better described as a “bridge” or “cross roads” for the interchange of materials and ideas than a uniform space; at the same time, “[i]t is... a dense network of a diversity of dividing lines - dividing lines between different economic and security systems, different political systems and political cultures, different languages, forms of expression and religious denominations”.²⁷

The deepest division that have evolved with time is arguably the difference in the development of democratic political structures between the developed, affluent, and largely democratic, Christian European states of the Northern coast and the developing, largely authoritarian and oligarchic Muslim countries of North Africa and Middle East - Qaddafi's Libya being an infamous example -, despite increasingly “modernised” - or better “westernised” - structures and government attitudes in the latter. Having said that, the gap shows signs of diminishing in the future, as there is a noted increase in the number and influence of a variety of social movements and organisations striving for social, political and civil rights, and pressing towards democratisation throughout the region.²⁸ It has, in fact, been argued that security and stability in the Arab world are essentially linked to the governments' response to public demands for accountability, greater representation, and respect for the rule of law and human rights, all essential components of the West's understanding of democracy.²⁹

From a geopolitical standpoint, for many centuries the Mediterranean coasts were hardly secure, because of the semi-permanent warfare between Muslims and Christians. It is only for 150 years that peace has - to all intents and purposes - prevailed between North and South, East and West. Still, it has been repeatedly asserted that “the Mediterranean is a barometer of the world's political climate”, since inter-state relations in the region have always reflected the polarisation of international allegiances - as some European countries are members of NATO, others are strongly dependent on major countries, and others are non-allied or neutral - and the relations between the

²⁷ W. Weidenfeld, *Challenges in the Mediterranean - The European Response*, 1991, p.7. See also S.C. Calleya, *Navigating Regional Dynamics in the Post- Cold War World - Patterns of Relations in the Mediterranean Area*, 1997, Chapter 3.

²⁸ See E. Goldberg, R. Kasaba & J.S. Migdal, *Rules and Rights in the Middle East - Democracy, Law, and Society*, 1993.

²⁹ See M. Azzam, ‘Islam: Political Implications for Europe and the Middle East’, in P. Ludlow (ed.), *Europe and the Mediterranean*, 1990, pp.91-2.

two former superpowers, both having an “overwhelming strategic stake” in this Sea.³⁰ The sea has, indeed, during the “cold war” era, been the primary area of superpower presence in the region.³¹

Apart from the USA and Russia, the other important power in the region is France. In fact, this is probably the only country in the basin possessing the political and economic motivation and military power - with its large nuclear arsenal - to play such a role. Significantly, France was the architect of the EEC’s “Mediterranean Policy”, whereby a series of co-operation and association agreements between the Community and third Mediterranean countries were concluded.³²

More generally, the present high volume and complex pattern of traffic in this Sea,³³ situated at the crossroads of three continents, is a feature that helps measure its importance both to its coastal states and to other parts of the world. The surrounding lands are rather rugged - mountain or desert - and often the neighbouring countries’ policies are inhospitable as well. The case of Israel, having no other passageway to the world markets than the Mediterranean waters and a small outlet to the Red Sea, illustrates how important access to the sea is for a country’s economic survival.

Now, together with the notorious Middle East web of problems, there is a considerable number of major and minor outstanding matters in the region, such as the dispute over the Spanish Sahara; the status of Gibraltar; and of the two Spanish enclaves in Morocco, Ceuta and Melilla; the Libya-Tunisia territorial sea boundary; the Syro-Turkish dispute over Alexandretta; the Greco-Turkish problems over the Aegean and Cyprus; and last but not least, the revived tensions and wars in the Balkans, after the splitting-up of former Yugoslavia.

Be that as it may, in the past decades, considerable efforts have been made to achieve the freezing and reduction of all non-Mediterranean powers’ naval forces, the neutralisation and denuclearisation of the region, and the security that a Mediterranean - zone of peace would guarantee.³⁴ Some have even suggested that there is a trend towards a new “Mediterranean identity” based precisely on the community of interests that economic and strategic interdependence creates,³⁵ while others came to fear that this “identity” will eventually displace non-regional powers,

³⁰ J.W.Lewis, *The Strategic Balance in the Mediterranean*, 1976, p.1. See also S.D.Snyder, *Defending the Fringe - NATO, the Mediterranean, and the Persian Gulf*, 1987, pp.3-27.

³¹ In 1975, the US had approximately 60,000 men, 275 combat aircraft, and 45 ships in the Mediterranean, stationed in their extensive base network, see Lewis, *op.cit.* n.30, pp.17-33; the Soviets had normally around 55 ships, of which 25 warships, *ibid.* p.59.

³² See Lewis, *op.cit.* n.30, p.111; and *infra*, Chapter 6, pp.302-3.

³³ See *infra*, pp.47-8.

³⁴ See Truver, *op.cit.* n.1, p.92; A.K.Abbadi, ‘Security and Co-operation in the Mediterranean Basin’, 14 *O.D.I.L.*, 1984, p.65; V.V.Lyubomudrova, ‘Turning the Mediterranean into a Zone of Peace and Security and the Law of the Sea’, XVII *Thesaurus Acroasium*, 1991, pp.501-41; and Calleya, *op.cit.* n.27, Chapter 5.

³⁵ See Truver, *op.cit.* n.1, p.92.

through, for example extensive EEZ claims that “would blanket the entire sea”.³⁶ It does not seem that these fears are justified, however. As it has been rightly pointed out, due to economic, political, and practical reasons, “the only concerted movement that has taken place in the Mediterranean is that of *non-establishment* of EFZ or EEZs”.³⁷ In fact, considerable pressures to maintain both freedom of fishing and freedom of navigation in the region, combined with long-standing maritime boundary delimitation frictions, make future proclamation of EEZs in the Mediterranean basin highly unlikely.³⁸

Although safe conclusions on the future shape of the geopolitical setting in the region are impossible, since, after the termination of the “cold war” era, new strategic aspirations in the region are far from clear, some discern fresh forms of fragmentation coming about in the area, in developments such as the process of EU enlargement combined with trends towards re-nationalisation in European foreign policies; the crisis in the former Yugoslavia; the Arab-Israeli negotiations; and the Islamist movement.³⁹ It is also suggested that the end of the “cold war” meant that the East-West dimension within the Mediterranean region has largely disappeared; that North Africa has emerged as a “grey area” trying to find its position between its Islamic background and the “westernisation” process; and that the US interest is shifting to the Near East.⁴⁰ At the same time, Eastern Europe became a serious rival for the capital and investment that the South and East Mediterranean neighbours of Europe need.⁴¹

Time will test the validity of these hypotheses. In any case, it seems that, today, sub-regional relations are a priority for most countries as the “grip” of the superpowers has weakened and has not yet been replaced by another defined pattern of international politics.⁴² Two recent developments are thought to be particularly crucial for the future balance in the region,⁴³ namely the Peace Treaties signed between Israel and PLO, and the EU initiative towards what it calls a “Mediterranean Partnership” that will work towards establishing a free trade zone in the whole of the Mediterranean basin.⁴⁴ In this context, the EU is seen by some as the next dominating power

³⁶ W.D.Burnett, ‘Mediterranean Mare Clausum in the Year 2000?’, 34 *Naval Law Review*, 1985, p.134.

³⁷ T.Ijlstra, ‘Development of Resource Jurisdiction in the EC’s Regional Seas: National EEZ Policies of EC Member States in the Northeast Atlantic, the Mediterranean Sea, and the Baltic Sea’, 23 *O.D.I.L.*, 1992, p.176.

³⁸ See B.Conforti, ‘The Mediterranean and The Exclusive Economic Zone’, in U.Leanza (ed.), *The International Legal Regime of the Mediterranean Sea*, 1987, pp.173-80; and U.Leanza & L.Sico (eds.), *Zona Economica Esclusiva e Mare Mediterraneo*, 1989.

³⁹ See R.Aliboni, ‘Collective Political Co-operation in the Mediterranean’, in R.Aliboni, G.Joffé & T.Niblock (eds.), *Security Challenges in the Mediterranean Region*, 1996, pp.52-3.

⁴⁰ See Calleya, *op.cit.* n.27, p.232.

⁴¹ See A.Biad, ‘Security and Co-operation in the Mediterranean: A Southern Viewpoint’, in Aliboni *et al* (eds.), *op.cit.* n.39, pp.41-9.

⁴² See Calleya, *op.cit.* n.27, Chapter 4.

⁴³ See *ibid*, pp.224-5.

⁴⁴ See *infra*, Chapter 6, pp.274-5.

in the area, based on the trade and broader economic dependency of the Southern countries on the former.⁴⁵

Let us, then, examine the patterns of economic development in the Mediterranean and their implications for the coastal and marine environment.

1.3. Economic Activities and Human Pressures on the Environment.

To remark that there is a very close relationship between economic activity and coastal development is admittedly commonplace. In fact, the coastal zone is subject to multiple uses, the main ones being construction of human habitation and related infrastructure; domestic waste disposal; industrial waste discharge and plant cooling; marine mining; tourism and recreation; fishing; aquaculture; and shipping. The sea has - until recently - been viewed as large enough to carry away all sewage and effluents, as a convenient "sink" for all unwanted by-products of these activities. Thus, the Mediterranean faced "pollution" problems already from ancient times.⁴⁶ The vast difference between the past and the present, however, is that during modern times man has been responsible for the discharge of pollutants into the marine environment in such quantities and concentrations that cannot be handled naturally, that exceed the natural self-cleansing capacity of a given environment, and consequently cannot be assimilated or rendered harmless; moreover, man has come up with an immense array of artificial substances that are toxic, unknown to nature and cannot be dealt with either.

Enclosed and semi-enclosed seas are especially susceptible to human activities, depending in each case on the scale of riverine, atmospheric, and coastal inputs relative to the rate of flushing into the ocean, the latitude, depth, and general configuration of the sea, and, of course, the size of human populations residing around it, the level of their activities and land use practices. All these factors, as specified in relation to the Mediterranean Sea, burden the marine environment with a variety of pollutants, originating both from land and from ships.

The principal land-based sources of pollution in the region are domestic and industrial waste - both liquid and solid -, agricultural runoff, river discharges, and the atmosphere. All these are, in fact, thought to account for almost 80% of the pollution load ending up in the sea,⁴⁷ with the Northwestern basin receiving one-third of the total, the Adriatic Sea about one-quarter, the Tyrrhenian and Aegean Seas each about 10%, whereas the other six sub-regions each account for

⁴⁵ See Calleya, *op.cit.* n.27, pp.233 and 237-8.

⁴⁶ Most likely siltation from tree-cutting and overgrazing and some local sewage disposal problems, while excessive plankton blooms were repeatedly recorded. The first mineral pollutants of the Mediterranean date back to the copper-workings of Cyprus, the iron-workings of Asia Minor and the tin-workings of the Phoenicians, see C.Osterberg and S.Keckes, 'The State of Pollution in the Mediterranean Sea', 6 *Ambio*, 1977, p.322.

⁴⁷ See UNEP, *op.cit.* n.5, p.28.

no more than 5% of the total load.⁴⁸ There follows a consideration of the pressures exercised on the Mediterranean coastal and marine environment, stemming from patterns of social and economic development of the past decades, and the main trends identified for the future.

1.3.1. Urbanisation.

The Mediterranean countries sustained a population of 450 million in 1999, while in coastal regions lived about 40% of that.⁴⁹ The densest areas were found around the Northwestern basin and the Tyrrhenian Sea, accounting for almost 40% of the total. Since the 1960s, a considerable proportion of the poorly skilled manual workers in the countries of Northwestern Europe consisted of immigrants from the Mediterranean, in view of the fact that, in the latter, agriculture was the main source of income and employment, while most industrial activities were still incipient. Changes in economic structures have brought about a reversal of the situation in some of the Southern European countries, especially Spain, Italy and Greece, which are now receiving immigrants, mainly nationals from the countries on the opposite side of the basin and the Balkans. This influx has led to some six million people of North African origin residing in EU countries today, most of them Muslim and not well-integrated into European society.⁵⁰

At the same time, the South and East of the basin have, since the mid-twentieth century, been characterised by an "urban explosion",⁵¹ not only with regard to the number of city-dwellers, but also to the density of urban housing; peri-urban sprawl; the transformation of ways of life and consumer patterns; the daily scale of the necessary commuting; and the nuisances of traffic jams and pollution.⁵² It is significant, in this context, that in the Mediterranean, urbanisation may be taken to encompass not only the growth of towns, but also the occupation of the coastal strip between towns, mainly as tourist accommodation, and in some countries, as secondary residences and recreation facilities.⁵³

Thus, in 1985, in all Mediterranean countries, the urban population was about 207 million or 58% of the total. The proportion of urban population, as well as coastal development - which is sometimes uncontrolled, poorly managed, or even illegal, especially in the form of tourist accommodation and facilities -, will probably continue to increase in all countries, until the

⁴⁸ UNEP/ECE *et al*, Pollutants from Land-Based Sources in the Mediterranean, *UNEP Regional Seas Reports and Studies*, No.32, UNEP, 1984, p.22.

⁴⁹ See EEA, *State and Pressures of the Marine and Coastal Mediterranean Environment*, Environmental Issues Series No.5, 1999; and Grenon & Batisse (eds.), *op.cit.* n.5, pp.46-7.

⁵⁰ See E.Mortimer, 'Europe and the Mediterranean: The Security Dimension', in Ludlow (ed.), *op.cit.* n.29, pp.111-8.

⁵¹ Because of total population growth and by augmented rural flow to cities, whose contribution sometimes increased certain cities to an annual rate of more than 3%, e.g. Algiers and Cairo. Still, the Mediterranean has always been a region of large, even monstrous cities, such as Rome and Constantinople (Istanbul), so that major urban centres have historically been concentrated around coastal settlements and ports, primary examples being Barcelona, Marseilles, Genoa, Naples, Piraeus, Limmasol, Alexandria, Tunis, and Algiers.

⁵² See L.Leontidou, *The Mediterranean City in Transition: Social Change and Urban Development*, 1990.

⁵³ See UNEP, *op.cit.* n.5, p.10.

attainment of a saturation level for each society. In this connection, it should be noted that “post-industrialisation” - the shift to a service and communication economy -, mostly taking place in countries of the North and requiring a highly-educated and skilled workforce not being so limited to a particular place, together with improved transport, is likely to lead to a spread in urbanisation away from traditional industrial centres, and preferably in the coastal zone which offers pleasant working and living conditions.⁵⁴ The resulting environmental pressures, mainly land consumption, water supply and evacuation, waste, air and noise, urban planning and green spaces, are considerable, but different in each case as the size of settlements is crucial for their sustainability.⁵⁵

The production of waste is the main marine pollution problem caused by this phenomenon. Domestic effluents burden the marine environment with organic matter, microbial pollution,⁵⁶ and nutrients, as well as detergents from household uses, and lubricating oils.⁵⁷ A substantial part of these effluents are carried by rivers, which are the single largest source of land-based pollution in the Mediterranean; northern rivers contribute the large majority of pollution, as only about 20% of the total flow is discharged along the Southern and Eastern shores.⁵⁸

In the Mediterranean, as in the rest of the world, water resources were, traditionally, regarded as free to the consumer, and this notion persists in the public mind, tempting or obliging governments or local authorities to subsidise their supply, thus leading to reduced incentives to conserve water, treat and re-use wastewater and prevent contamination of water bodies. Hence, there is a continuing increase both in volume and composition of liquid wastes, as more household chemicals are used, especially in countries with intermediate average incomes.⁵⁹

In the 70s, the most common system of waste disposal has been by marine outfalls without any prior treatment, relying on the self-purification capacity of seawater.⁶⁰ Since then, there has been an increasing awareness of the need to install waste water treatment plants along the coastal zone, but it was not until 1985 that the Mediterranean countries in the framework of MAP decided to adopt as a priority the establishment of sewage treatment plants in all cities with more than

⁵⁴ See *ibid*, p.11.

⁵⁵ See Grenon & Batisse (eds.), *op.cit.* n.5, pp.182-200.

⁵⁶ There is no data on domestic sources of microbial pollution to permit a direct assessment, but it is estimated that very large quantities are discharged with sewage, causing contamination of shellfish, and rendering waters unsuitable for recreational uses, notwithstanding considerable improvement in recent years, see UNEP, *op.cit* n.5, pp.50-1, and pp.59-60. It is noteworthy that, as recently as 1973, an epidemic of cholera, centred around Naples, spread by the consumption of infected shellfish, see R.B.Clark, *Marine Pollution*, 1986, p.166.

⁵⁷ See UNEP, *op.cit* n.5, pp.29-31. The direct discharges, as estimated in 1996, are in the order of $2 \times 10^9 \text{ m}^3$.

⁵⁸ See Jelfic *et al*, *op.cit.* n.3, p.22.

⁵⁹ *Ibid*, pp.8-9 and 20.

⁶⁰ Hence, in 1972, in the Northwestern basin at least 80-90% of sewage was discharged completely untreated either directly into the sea or into river estuaries, or by pipelines which did not normally extend to distances of more than 100 to 300m off the coast. In the Adriatic, for instance, only forty communities out of 556 along the Italian coast had some degree of treatment facilities, see FAO/GFCM, *The State of Marine Pollution in the Mediterranean and Legislative Controls, Studies and Reviews*, No.51, FAO, Rome, 1972, pp.6-8. In the same vein, 1978 information showed that only 50% of the population in the region as a whole was connected to a sewerage system, and a much smaller fraction to a marine outfall or a treatment facility.

100,000 inhabitants and appropriate outfalls and/or treatment plants in all towns with more than 10,000 inhabitants. Accordingly, any new installations were expected to involve biological treatment. Be that as it may, a 1996 survey showed that 90% of the population served by a wastewater collection system, is so served by municipal sewers.⁶¹

As far urban solid waste is concerned, such as organic matter, paper, glass, wood, textiles, plastics, and metals, there are considerable differences in the amounts produced in Mediterranean countries. At the same time, different treatment and disposal methods are used, while sometimes they are just dumped into the sea. According to the afore-mentioned 1996 study, 70% of solid wastes are disposed by "unspecified" means in the Mediterranean region, with the rest disposed either by composting (~21%), or incineration (~7%), while in the five OECD countries, i.e. EU countries and Turkey, there is an increasing trend in the generation of solid municipal and household waste.⁶²

Landfill disposal of solid waste and sludge are frequently practised, and leaching often presents a problem. Usually, the leachate is composed of the liquid produced from the decomposition of the wastes and liquids entering the landfill from external sources, and depending on circumstances, it may contain many contaminants, in high concentrations. Leachate formation and movement is often a threat for groundwater quality and may sometimes reach surface waters causing extensive local pollution problems.

Sea disposal of solid wastes has always been controversial. In the past few years, the aesthetic nuisance and the hindrance to beneficial uses that floating paper, wood, plastic, and fishing gear creates has increasingly become unacceptable - although still a problem - in the region.

Turning to economic development in a strict sense, the major characteristic of the region is the discrepancy among different countries, since in the Mediterranean one can come across some of the core countries of the developed world, integrated in the EU, e.g. France and Italy; some semi-peripheral - despite their EU membership - economies, e.g. Spain and Greece; and many more peripheral/developing countries at various levels of industrialisation and development. All of them, however, are influenced by recession periods and the global fluctuations in economic growth, trade and monetary equilibria. The general trends in the region are favouring the continuing industrialisation of the Southern and Eastern coast, while developed economies are expected to shift towards lighter industries and services.

⁶¹ See UNEP, *op.cit.* n.5, p.31; and UNEP/WHO, *Survey of Pollutants from Land-Based Sources in the Mediterranean*, UNEP(OCA)/MED WG.104/Inf.10, UNEP, Athens, 1996. Some 33% of the population have no municipal sewage treatment system, and about 41% have the benefit of secondary treatment, with the rest having only preliminary and primary treatment. About 5% of the wastewater is re-used, of which 95% in irrigation; when discharged, about 85% of it goes directly or indirectly into the sea.

⁶² See UNEP, *op.cit.* n.5, p.33.

Now, at the regional level, so far, there has been very little in the way of economic policy. The EU Common Agricultural Policy and other Community policies only apply to the Mediterranean Member States, i.e. four out of the twenty-two countries bordering the Sea. Therefore, the relevant economic policies in the region remain national. Bearing that in mind, the main sectors of economic activity in the Mediterranean, their future development, and the pollution problems they create, will be examined next.

1.3.2. Agriculture.

There is a trend of continuing industrialisation of the agricultural sector.⁶³ The largest technological progress is likely to occur in Southern and Eastern countries, where in the next twenty to thirty years industrial consumption by the agricultural sector will equal that of the North. All this activity will affect the environment because of the energy, water and other types of consumption required. Agriculture in the hinterland, if not a "use" of the coastal zone, has a significant environmental impact on the latter by way of release of pesticides and fertilizers, which are often over-applied, and washed by rain directly or indirectly into the sea. Hence, land-based pollution from the massive use of fertilizers would be the most obvious outcome of increased industrialisation, even if technological innovations lead to some economy in this area. At present, the fertilizers industry is responsible for the largest discharges of mercury, and causes pollution from ammonia and sulphuric and phosphoric acids. Pesticide consumption data is not available from all countries. They can be transported by the wind and contaminate the open sea, and cause fish mortality and destruction of fauna. Organochlorine pesticides, e.g. DDT, are persistent and highly toxic; they have been restricted or banned, but past accumulation is reported even in remote areas and organisms.

1.3.3. Fishing - Aquaculture.

As far as fisheries are concerned, these are more abundant in the southern area of the Western basin. The Eastern basin is distinctively poorer,⁶⁴ a fact attributed to the Sicily channel having acted as a barrier for the diffusion of species in past geological periods. The first signs of fisheries overexploitation came with the increase in catches during the last decades. In the second part of the 80s, there was a marked decline in Mediterranean fisheries, mainly attributed to overfishing and marine pollution, accompanied by an increase in aquaculture.⁶⁵ Today demersal stocks of the northern seas are considerably depleted, and many fisheries depend on the zero-class

⁶³ See Grenon & Batisse, *op.cit.* n.5, pp.81-100; and UNEP, *op.cit.* n.5, pp.16-8.

⁶⁴ The mean gross yearly production of the coastal waters of Israel is around 60% less than that of the Western Mediterranean, see M.Moraitou-Apostolopoulou & V.Kiortsis (eds.), *Mediterranean Marine Ecosystem*, 1985, p.8. But see *ibid*, p.320 for doubts resulting from new data.

⁶⁵ See Grenon & Batisse (eds.), *op.cit.* n.5, pp.100-2; and UNEP, *op.cit.* n.5, pp.18-22.

of fish and often on juveniles that are just being recruited. This is particularly acute in the Adriatic and Central Mediterranean: It has been estimated that in the sea around Italy the standing biomass is about 20% of that of comparable waters as a result of heavy overfishing.⁶⁶ On the other hand, coastal pelagic fisheries can still be developed, although there is not much demand due to consumer preferences.

Apart from the negative impact on stocks themselves, fishing activities in the Mediterranean have other harmful consequences: Driftnet fishing - although not widely used in the region - and floating long lines lead to massive, unintended destruction of non commercial fish, birds and often endangered species, like the Leatherback, Green and Loggerhead turtles and mammals, and pollute the marine environment with lost or discarded nets and other gear. Finally, direct pollution from fishing fleets, although small compared with pollution caused by merchant and pleasure fleets, consists mainly of bilge waters, solid waste (mainly garbage), synthetic netting, twines and ropes and lost "make do" buoys (often empty containers and polystyrene blocks), which are often washed up on beaches.

Mediterranean fish-farm production was estimated at around 26,500t in 1978, basically consisting of species with high market value; by 1996 this figure had increased to almost 250,000t and is expected to continue increasing, as aquaculture becomes more and more attractive and intensive, albeit not free from environmental problems. In fact, intensive aquaculture (in cages or tanks) uses substantial amounts of chemicals to control parasitic and fungal infections in the cultured species; supplementary fish feeds may also contribute to local eutrophication. More important, however, will be the added competition for space along the already burdened Mediterranean coastline, especially in case of extensive cultures encroaching on coastal lagoons, salt marshes and coastal wetlands, *per se* endangered habitats.⁶⁷

1.3.4. Industry.

The period 1945 to 1985 was characterised by a spectacular industrialisation process in the Mediterranean countries, in the latter year providing approximately 16% of the world industrial production, with France alone accounting for 6%.⁶⁸ However, there is again a persistent imbalance between the two sides of the basin: The Northern countries still account for approximately 93% of total manufacturing value added, and three countries alone account for 87% , i.e. France, Italy and

⁶⁶ See FAO, Marine Resources Service, Fishery Resources and Environment Division, *Review of the State of World Fishery Resources*, FAO Fish.Circ.(710) Rev.5, 1985, p.64.

⁶⁷ Jelfic *et al*, *op.cit.* n.3, pp.44-5.

⁶⁸ See Grenon & Batisse (eds.), *op.cit.* n.5, pp.103-119; and UNEP, *op.cit.* n.5, pp.11-2 and 25-7..

Spain. And that is despite economic growth in the Middle East and North Africa, which, during the 60s and 70s, was the highest in the world, mainly due to oil exports.⁶⁹

Since the 1980s, however, especially the North is suffering from a decline in traditional industries, such as steelmaking, the cement industry, oil refining and the related petrochemicals industry, as well as the mining industry, because of fierce competition from other industrialised countries and market saturation for mass-consumption end-products. At the same time, in Southern and Eastern countries (including Turkey), industrial development slackened less, but nevertheless became irregular and variable from country to country, largely depending on indigenous adaptability to the industrial evolution of this period and on considerable loss of revenue from declining oil exports, which often led to slow or even negative *per capita* growth rates. By the 1990s, the “lost decade” of the 80s prompted many of these governments to begin economic reform programs to improve resource efficiency and spur private sector growth. In the process, however, they came face to face with the environmental legacy of their earlier development strategy, with their unsustainable use of natural resources and widespread environmental degradation.

As far as the North is concerned, future trends indicate that, in the best of cases, a growth in production and employment will follow GDP growth for food and agriculture, primary processing, and light industry, whereas only “high technology” sectors in capital goods and consumer durables industries, such as electronics, telematics, and biotechnologies, have most potential for real expansion. In the South, on the other hand, the so-called light industries are likely, at least initially, to have the highest relative growth, because of the fast expansion of domestic markets and comparative advantages for exports, while agro-food primary processing industries will also enjoy steady expansion.

The main environmental impacts of industrial activities affecting the coast and the sea are the so-called “littoralisation” of the coast - i.e. human implantation in the coastal zone -; and land-based pollution, including hazardous wastes. More specifically, the industry releases organic matter, suspended solids, phenols, PCBs (halogenated hydrocarbons), other oils, detergents, solvents, organic chemicals, heated cooling water, and metals.

As far as industrial effluents are concerned, the most heavily polluting industries in the Mediterranean region are leather tanning and finishing, mainly encountered along the Spanish and Italian coastline and in the area of Athens and Alexandria; iron and steel basic industries, chiefly situated around Marseilles, Genova and Athens; petroleum refineries and oil terminals; and chemical production. Other industries of relevant significance include textile manufacturing, food processing and canning, and pulp and paper factories.

⁶⁹ It is notable that, during these years, in a drive for self-sufficiency, these countries embarked on a strategy of industrial and agricultural protectionism supported by trade barriers, a strategy encouraged by publicly subsidised energy, water and agrochemicals, see B.Larsen, ‘Middle East and North Africa Region’, in <http://www-esd.worldbank.org/envmat/vol2f96/mena.htm>.

The discharge of sewage occurs in the vicinity of all major cities of the basin, and has drastically modified the ecosystem therein.⁷⁰ The “dumping” of heat (cooling water) from industrial and power-generating plants may also have contributed to such modification. In this context, pollution combatting techniques are not being developed as fast as industry is expanding. Direct industrial discharges to the sea are generally dispersed relatively quickly, usually within only a few ten kilometres of the point of discharge; nonetheless, flora and fauna are usually severely affected within this area. Dispersion and dilution are much slower if discharge is direct into rivers, and estuaries and deltas serving as spawning grounds for many species can be severely prejudiced.

Moreover, sometimes, nutrients are discharged in such immense quantities from sewage and agricultural and industrial activities that eutrophication occurs; having abundant nourishment, the phytoplankton population increases so much that the dissolved oxygen in the surface waters becomes depleted due to the increased respiratory demand of micro-organisms digesting the excess organic matter.⁷¹ There are often outbursts of heavy, often almost monospecific, blooms or “red tides” in the Mediterranean, and in some instances there will be very few beneficial living organisms left due to the development of azoic conditions. Eutrophication, as reported in the Mediterranean, is mostly associated with the release of untreated domestic-industrial waste water.⁷² It is a local rather than a regional problem, frequent in the North Adriatic, and the Tyrrhenian Seas, the Izmir Bay (Turkey), Kastela Bay (Yugoslavia), Elefsis Bay (Greece), the lagoon of Tunis and in all such areas where the rate of input of waste exceeds that of the exchange with the open sea.⁷³

The industry's solid by-products include slag, sludge, dust, combustion ashes, and mine tailings.⁷⁴ Most of the solid residues are inorganic and their impact on the environment still remains a controversial issue.⁷⁵ However, there are certain types of wastes containing specific pollutants of known toxic effects to the environment, which, in the Mediterranean region, principally come from the chemical industry, including heavy chemicals, fertilizers, primary plastics, rubber etc.; other bulk materials such as non-ferrous metals and pulp; speciality chemicals, such as pharmaceuticals, fine chemicals, dyes, paints and glues; and chemical preparations.

It should be remarked in this context that the concept of hazardous waste is not yet entirely recognised and implemented in the Mediterranean, in the sense that in some areas, most hazardous residues such as solvents, organic chemicals, acids, alkalies, spent catalysts and inflammable solids

⁷⁰ The annual direct discharges, as estimated in 1996, amounted to $6 \times 10^9 \text{ m}^3$.

⁷¹ See UNEP, *op.cit.* n.5, pp.60-1; and UNEP/FAO/WHO, Assessment of the State of Eutrophication in the Mediterranean Sea, *MAP Technical Reports Series* No.106, Athens, 1996.

⁷² Industrial waste sources account for about half of the organic load from the coastal area, while domestic sewage and agricultural organics contribute roughly a quarter each. In practice, a large percentage of the industrial wastes is discharged together with domestic sewage to form a single municipal effluent discharge; having said that, domestic organics are highly degradable, whereas agricultural ones are relatively stable.

⁷³ See Jelfic *et al*, *op.cit.* n.3, pp.46-8.

⁷⁴ See *ibid*, pp.39-40; and UNEP, *op.cit.* n.5, pp.31-2.

⁷⁵ See Jelfic *et al*, *op.cit.* n.3, p.38, for information on the “Cassidaigne” affair.

are currently discharged directly to the sewage system or disposed of through open dumping. In most countries, however, effort is being made to incorporate the notion in the existing waste management policy, although there is a lack of data to quantify the magnitude of the problem. In this context, it has been persistently recommended that the measures and programmes to be developed in the region to control liquid wastewater discharges should be accompanied by complementary measures dealing with the treatment and disposal of solid and especially hazardous waste.⁷⁶

Finally, another important carrier of, mainly industrial but also agricultural and urban, pollution is the atmosphere, through which wastes, especially particulates, are deposited dry on the sea surface or washed by rain.⁷⁷ In fact, a considerable proportion of land-based pollution is now thought to be airborne, e.g. 50% of some heavy metals and nitrogen,⁷⁸ but the mechanisms by which it spreads ("aerial catchment areas") are rather poorly known, as it is very difficult to make direct measurements of gas fluxes across the air-sea interface. Indirect methods developed have not yet produced results for the whole of the region.⁷⁹

1.3.5. Production and Consumption of Energy.

Both consumption and production of commercial energy throughout the Mediterranean basin have changed radically in the past decades, and have been greatly influenced by the oil crises.⁸⁰ Energy consumption has developed over sixfold between 1950 and 1985,⁸¹ whereas total commercial energy production has increased nearly ninefold. Nevertheless, there is - yet again - a very big gap between the countries of the North and the rest, as roughly 70% of coal production and 95% of primary electricity generation is concentrated in the former. This difference is gradually being reduced, as growth of consumption in the North has tended to peak, whereas in the South and East, it is still on the increase. In fact, future scenarios foresee the continued expansion of electricity in many countries, based partly on coal. Be that as it may, in both coasts, oil remains the primary energy source, although some importing countries have made considerable efforts to reduce their

⁷⁶ WHO, *Environmental Health No.8: Industrial Wastewater in the Mediterranean Area*, Copenhagen, 1986.

⁷⁷ See UNEP, *op.cit.* n.5, pp.36-8.

⁷⁸ See UNEP/WHO, *Assessment of Airborne Pollution of the Mediterranean Sea by Sulphur and Nitrogen Compounds and Heavy Metals in 1991*, *MAP Technical Report Series*, No.85, Athens, 1994; and GESAMP, *The State of the Marine Environment, UNEP Regional Seas Reports and Studies*, No.115, UNEP, 1990, pp.34-7.

⁷⁹ Take note of several relevant projects under way, the principal being DYFAMED (Dynamique et Flux Atmosphériques en Méditerranée Occidentale - France); a sub-project of the Community EROS-2000 (European River-Ocean System) project, attempting to compare riverine and atmospheric fluxes to the North-Western Mediterranean; and the MED POL component of the WMO Global Atmospheric Watch (GAW), see UNEP, *op.cit.* n.5, p.36.

⁸⁰ See G.Luciani, 'The Mediterranean and the Energy Picture', in G.Luciani (ed.) *The Mediterranean Region: Economic Interdependence and the Future of the Society*, 1984, pp.1-40; Grenon & Batisse (eds.), *op.cit.* n.5, pp.120-140; and UNEP, *op.cit.* n.5, pp.25-7.

⁸¹ It is characteristic that, in 1950, total consumption in the Mediterranean was virtually equivalent to that of Spain alone in 1985.

consumption. Except from France, where uranium has largely replaced heavy fuels for the thermal generation of electricity, the shift from oil has been generally towards natural gas. Unlike coal and electricity, oil is produced in the South and East - more than 90% in 1986 -, mainly in Libya, Algeria, and Egypt, followed by Syria and Tunisia.

On the other hand, offshore oil operations in the Mediterranean are not very extensive; depending on the year, a score of mobile drilling rigs are in operation, accounting in 1985 for 3% of the world total, as compared with 13-14% in the North Sea. The main active areas are the Adriatic, the Ebro shelf, the plateau between Sicily and Tunisia, the Gulf of Gabes, the Nile Delta, and the Aegean Sea. For the moment, there is no question of a major oil field in the Mediterranean continental shelf, although there may be a deep-sea potential. The greatest environmental impact comes from exploration, production, and removal of extracted oil, along with associated installations and activities on land, and the processing in refineries.

Refining capacities in the North should continue to contract, since there is already surplus capacity, and a peak in oil consumption is expected; at the same time, refining structure changes with an increase in expensive conversion of heavy products into light ones, fuels and fillers for petrochemicals. In the South and East, refining capacities are likely to increase considerably and could more than double by the start of the next century. Their environmental impact is considerable both to the air and the sea: In 1975, UNEP estimated that Mediterranean refineries discharged about 20,000t/annum of oil into the sea; however, since then, advances in methods used must have reduced this figure.

As far as nuclear energy is concerned, there are sixty plants in the Mediterranean countries, about half of them on the coast, with an installed capacity of about 50,000 MWe. The nuclear cycle, from uranium in the ground to the end consumer of electricity, is rather complex, involving risks of pollution and/or "conventional" and radioactive accidents. The most serious fall under the category of accidents with very low probability and large-scale potential consequences, comparable to some extent to natural disasters. With regard to long-term storage of radioactive waste produced, technical solutions have been proposed but have not yet been adopted on an industrial or market scale, or as a definitive answer to the problem. However, it does not seem that the pollution load from radioactive substances in the Mediterranean presents a major problem.⁸²

It should finally be stressed that coal-fired power stations are, at present, the major source of atmospheric pollution and global climate change, emitting CO₂, SO_x, NO_x, CO, hydrocarbons, dust, trace heavy metals, radon, etc., and they also produce large amounts of polluted liquid effluent

⁸² Radioactive discharges from nuclear plants are almost exclusively concentrated in the Northwestern basin and the Adriatic Sea, i.e. France, Italy and Spain. In general, levels are and will continue being low, especially if compared to the radioactive contaminants in other discharged materials, e.g. phosphates, and as a result of fall-out from weapon test; and that is despite the considerable impact of the Chernobyl accident still being felt in Mediterranean waters, see UNEP/IAEA, Assessment of the State of Pollution of the Mediterranean Sea by Radioactive Substances, *MAP Technical Reports Series*, No.62, Athens, 1992.

and solid waste, ash, and recovered flying ash. More generally, the main toxic substances emitted during the generation, transformation and consumption of energy are benzene and other aromatic hydrocarbons, from crude oil processing; heavy metals, notably lead from consumption of leaded petrol; and even radioactive substances from the burning of coal and heavy fuels. Having said that, there is considerable effort to develop “clean” methods of production and expand the use of renewable energy sources, which, in the Mediterranean, basically involve water, sun, wind, and biomass, but also hot subterranean water producing geothermal energy, a rather poorly known and under-exploited source of energy at present.

1.3.6. Tourism.

Many features have contributed to the tourist attraction of the Mediterranean, including geographical proximity for Northern European tourists; climate; beauty of landscapes and natural sites; exceptionally rich cultural heritage and more recent historical ties, which have fostered the habit, even created a tradition, of inter-regional and international exchange and travel.⁸³ Hence, in 1999, Mediterranean countries as a whole accounted for nearly 30% of the world tourist market; that made the Mediterranean the leading “tourist basin” in the world. In numbers, the Mediterranean market rose from 58million in 1970 to 135million tourists in 1990, with the three Northwestern countries, Spain, France, and Italy, receiving between 70 and 80% of international tourism, followed by Yugoslavia and Greece; the remaining 10% was shared among all the other countries, some of which experiencing spectacular growth.

The seasonal nature of tourist arrivals is a very accentuated feature causing great problems of employment, accommodation, resources management - notably water -, and pollution. Apart from Algeria, Israel, Egypt and to a lesser extent Syria, most other countries are affected by a high concentration of tourists during the summer quarter, when the population of some resorts is multiplied two to five times, while there is a considerable additional number of domestic tourists (estimated 105million in 1984), excessively burdening coastal regions devoted largely or almost solely to this industry and receiving the major bulk.⁸⁴

Be that as it may, tourism plays a sometimes important role in both the balance of payments and employment; in 1984, for example, the contribution of international tourism to GDP averaged 6.5% in the Mediterranean countries as a whole, and in 1999 exceeded 20% in Cyprus and Malta. Thus, in view of its importance for national economies in the region, tourism is bound to expand considerably in the future. According to moderate estimations for the year 2000, 350million visitors are likely to arrive in the Mediterranean, with the market share of the Northwestern countries

⁸³ See Grenon & Batisse (eds.), *op.cit.* n.5, pp.141-61; and UNEP, *op.cit.* n.5, pp.15-6.

⁸⁴ In fact, in Tunisia, 80% of foreign and domestic visitors go to the Mediterranean coast, whereas in Yugoslavia the figure reaches 90%.

expected to fall slightly, while the shares of the other regions, mostly Southern Europe followed by the Eastern basin and the Greater Maghreb, are likely to increase. This will lead to greater pressures on the environment, including consumption of resources, both land - as vast stretches of the coast, wetlands included, are turned into a continuous resort through a process of ribbon development - and water; pollution, especially noise, atmospheric and coastal waters pollution; and waste; as well as physical and socio-cultural pressures that are likely to increase, unless co-ordination and planning, and notably promotion of sustainable types of tourism, such as "eco-tourism", are developed.

1.3.7. Maritime Transport.

Finally, maritime transport plays - and is likely to continue playing - an irreplaceable role in the trade of Mediterranean countries, particularly if it involves the routing of weight cargo, large volumes of liquid, and dry merchandise, or even massive passenger traffic during seasonal migrations.⁸⁵ It is estimated that more than 200,000 commercial vessels over 100 gross registered tonnes (GRT) cross the Mediterranean each year, of which the large majority are simply in transit; in other words, at any moment there are about 2,000 ships at sea, 250 to 300 of which are oil tankers. Traffic is already heavy in some areas near major ports or near compulsory crossing-points, such as straits or the Suez Canal. Navigation conditions are usually better in the Mediterranean than in other parts of the world because of the reliability of maps and marine signalling, weak tides and currents and generally good visibility. However, all commercial vessels, as well as pleasure craft, contribute to the deterioration of the marine environment, shorelines and ports, on an everyday basis, by the discharge of garbage, litter, and even hazardous substances, albeit illegally.

A special characteristic of the region is the imbalance in maritime traffic between the Western and Eastern parts of the basin: The economic activity of Northwestern countries produces the largest volume of traffic in the region as regards tonnages of merchandise loaded and unloaded. In contrast, the activity in the South and East is more limited, with traffic being more a matter of necessary routing, than of requirements and resources of coastal states, since, for example, the oil loaded on their shores comes mostly by pipeline from non-Mediterranean countries.

The actual calculation of the "Mediterranean fleet" is a difficult task due to the special characteristics of the "flag" concept - some fleets, most notably the Greek one, have a considerable proportion of ships under "flags of convenience", in particular Panama and Liberia -, and to the fact that vessels registered in a country might be engaged elsewhere in the world never entering the Mediterranean, or possibly at another seaboard of countries like France, Spain, Turkey, Morocco

⁸⁵ See Grenon & Batisse (eds.), *op.cit.* n.5, pp.171-81; and UNEP, *op.cit.* n.5, pp.12-5.

etc.⁸⁶ The distribution of capacity is also quite imbalanced, in view of the fact that Greece, together with two largely “open” flags, Malta and Cyprus, account for over 70% of the GRT. It follows that transport capacity of Mediterranean flags hardly corresponds to the different countries’ share in the region’s maritime trade, and this trend is on the rise, leading to difficulties in ensuring compliance with anti-pollution regulations.⁸⁷

Mediterranean maritime traffic, by category of merchandise, comprises a very large hydrocarbon tonnage, which includes crude oil, refined products, and liquefied natural gas. The main flow of loaded tankers crosses the Mediterranean from East to West, primarily from the Suez and Near East, but also from Black Sea ports. Although crude-oil traffic is declining considerably, compared with the years before the second “oil shock”, the tonnage of oil cargo travelling through the Sea is estimated at about 20% (approximately 350million tonnes) of the world total, which is exceptionally high. Notwithstanding the fact that a significant increase in oil requirements in coastal states is not envisaged, transit traffic could increase as North Sea and US deposits become depleted. Moreover, the shift of refining processes closer to production sites would signify a rise in the proportion of refined products in traffic. Overall, a decline is probable in the average tonnage of tankers operating in the Mediterranean, which will lead to more units using the sea for the same tonnage transported.

As far as chronic oil pollution is concerned,⁸⁸ the two main Mediterranean basins have different loads; the Eastern basin has some well-defined centres of oil pollution, i.e. a few areas in the Aegean and around the pipeline terminals of the Middle and Near East, whereas in the Western basin oil terminals and refineries are much more numerous and the problem is wide-spread. Having said that, the principal source of chronic oil pollution is the day-to-day activity of ships, and in this connection the Mediterranean Sea has always been without adequate reception facilities for ballast waters.⁸⁹ In 1983, thirty-six out of fifty-two ports reviewed did not have the necessary facilities,

⁸⁶ That said, as at 1 July 1987, according to Lloyd’s Register of Shipping, all the 10,369 ships navigating under flags of Mediterranean states were equivalent to a fleet of 58.3m.GRT (14% of the world total), with a lading capacity of a little over 98m.t (or 15% of the world total). The distribution of tanker tonnage by Mediterranean flag and the relative importance of each country involved in oil import or export is even greater than that for the total fleet.

⁸⁷ See *infra*, Chapter 2, pp.80-2.

⁸⁸ The main sources of oil pollution in the Mediterranean are ballasting/deballasting operations of tankers; discharge of oily bilge-water; tank washing; accidental spills; terminal and bunkering operations; dry docking; refinery effluents and oil storage wastes; and discarded lubricants and other oils in municipal and industrial waste waters and rivers. Lubricating oil is indeed one of the most important pollutants, widely used in machinery, electrical and transportation equipment, chemical, rubber and plastic production, but there is little data indicating the amounts discharged in the Mediterranean region, although attention has repeatedly been drawn to their management, see UNEP/UNIDO, *Assessment of Used Lubricating Oils in the Mediterranean Sea and Proposed Measures for their Elimination*, UNEP, 1987.

⁸⁹ According to a 1972 survey by the GFCM, many of the oil ports possessed only one reception facility and often those that were available were not fully utilised, FAO/GFCM, *op.cit.*, n.60. The “load-on-top” system was inconvenient to use in the Mediterranean, as distances involved are too short and there was usually not enough time to transfer the ballast water back and forth, to clean the tanks and to allow the water to settle out from the oily washings and dirty ballast, Truver, *op.cit.* n.1, pp.104-5. Therefore, most tankers continued to discharge their ballast, washings and oily bilges, in the two areas of the Mediterranean Sea where such discharges were permitted under the 1954 OILPOL, i.e.

(continued...)

although MARPOL having entered into force the same year banned all discharges in the area,⁹⁰ and the situation has since improved at a very slow pace.

As far as accidental oil pollution is concerned, the situation in the Mediterranean as compared with the rest of the world oceans has been unusually good.⁹¹ In fact, in the period between January 1990 and December 1995, the Regional Marine Pollution Emergency Response Centre (REMPEC) reported twenty-nine major accidents (out of 145 maritime accidents reported in all), of which nine were due to sinking, nine were due to collision, eight were due to operational failures, two were due to fire or explosion, and one due to grounding.⁹² The cargo involved was predominantly oil, but also other hazardous substances such as ammonia, barite, potash, propylene, sulphuric acid etc. However, risk of accidents should increase in the future in proportion with the increase in traffic, but spillages would involve smaller amounts of material. Notably, refined products are more volatile and soluble than crude oil, but also more explosive and/or toxic. On the other hand, it should also be noted that increase in transport implies the construction of new ships complying with international standards, and, hopefully, utilising advanced technology to avoid human errors.

It should be noted in this context that the toxicity of petroleum hydrocarbons depends on the composition of the petroleum, the concentration and the type of organisms exposed. Generally, oil is biologically toxic and depletes oxygen in the water. The impact of oil on fish and mammals includes tainting, contamination by carcinogenic compounds, diminution of populations, death; consumption of such food may lead to poisoning.⁹³ In addition, cyclonic circulation in the Mediterranean tends to deposit the oil on the shores or to accumulate it at certain exposed points, no matter whether it comes from offshore or from land, which means that fishing gear is coated and beaches - and their recreational utility - damaged. Having said that, oil is not as dangerous as other chemicals. The wide-spread concern about it stems from its visibility as it forms slicks and tar lumps, and from celebrated accidents attracting public attention. Some of the chemical dispersants used in large quantities to control spills can be more toxic to marine life than oil itself or cause it to sink and cover extended areas of seabed.

⁸⁹(...continued)

between Italy and Libya, and South-West of Cyprus. However, these two areas are situated within two surface gyres causing the residues to be trapped indefinitely and become highly concentrated.

⁹⁰ See Grenon & Batisse (eds.), *op.cit.* n.5, p.173.

⁹¹ On the effective response to the explosion of Haven, carrying 144,000t of crude oil, near the port of Genova in 1991, see A.Alati, 'Emergency Response at the Port of Genoa', UNEP *Industry and Environment*, Vol.15(1/2), 1992, pp.69-72.

⁹² See UNEP, *op.cit.* n.5, p.14.

⁹³ GESAMP, Impact of Oil on the Marine Environment, *Reports and Studies*, No.6, FAO, Rome, 1977.



Information available on inputs of oils, and of the relative importance of different sources, in the Mediterranean is limited.⁹⁴ Le Lourd's 1975 estimate of 0.5 to 1 million tons/year,⁹⁵ however, remains a reasonable figure,⁹⁶ in view of the fact that although the amount of oil transported over the world's oceans has increased considerably, there has been a significant reduction in the quantity of oil discharged into the sea due to the entering into force of the MARPOL Convention.

As far as natural gas is concerned, increased use should lead to new trans-Mediterranean pipelines (apart from the already existing Algeria-Italy pipeline, there are projects to link Algeria to Spain), presenting the most economical means of transport for distances not exceeding 3,000km. Risk of explosion aside, transport of gas by sea seems fairly safe, as there is only one serious accident reported so far involving grounding on a rock in the Straits of Gibraltar.

It should also be noted that although the main products transported "in bulk" on the Mediterranean Sea are ores, coal, and grain, hazardous chemicals, such as propane, ammonia, benzene, sulphuric and phosphoric acids, caustic soda etc., are also transported in significant quantities. There are no global statistics on maritime transport of chemicals in the Mediterranean; only some national figures exist, but the section on unidentified products covers usually more than 20% of the data reported.⁹⁷ However, chemical products, most frequently transported "in bulk" in considerable quantities, can be a source of accidental pollution causing grave ecological damage.

1.4. Concluding Remarks.

As has become evident by the preceding discussion, it is quite difficult to come up with a general pronouncement on the state of the Mediterranean environment; the sheer size, complexity, and diversity of the sea, and the human pressures exerted thereon, as well as the usually fragmented data, account for this difficulty. In 1977, in a much cited paper, Osterberg and Keckes presented an overview of the major pollutants in the Mediterranean and evaluated their relative importance.⁹⁸ They concluded that although the Mediterranean is polluted by pesticides, heavy metals and sewage in the coastal waters where population and industry are greatest, "the large open masses of... water do not seem to be much different from other oceans, except perhaps for oil tar-balls floating in the

⁹⁴ See Truver, *op.cit.* n.1, p.14; and UNEP, *op.cit.* n.5, p.49.

⁹⁵ See Ph.Le Lourd, 'Oil Pollution in the Mediterranean Sea', 6 *Ambio*, 1977, pp.318-9. But see Truver, *op.cit.* n.1, p.105, for a different estimation, i.e. that operational spills were in the range of 200-300,000m.t annually in the mid-1970s, but all other sources accounted for an additional one million m.t per year.

⁹⁶ See UNEP/IMO/IOC, *Assessment of the Present State of Pollution by Petroleum Hydrocarbons in the Mediterranean Sea*, UNEP/WG.160/11, Athens, 1987, for an estimation of an annual petroleum load of 635,000 tons, out of which, 330,000 are spilled from ballasting and loading operations, bilge and tank washings (even a figure of 500 x 10³t has been considered reasonable by IMO), 270,000 from land sources (160,000 from municipal and 110,000 from industrial sources) and 35,000 are airborne.

⁹⁷ See Jelfic *et al.*, *op.cit.* n.3, pp.37-9.

⁹⁸ Osterberg & Keckes, *op.cit.* n.46, pp.321 *et seq.*

water and for the elevated levels of mercury found in migratory fish, such as tuna and swordfish”.⁹⁹ In the same vein, the 1990 UNEP Report on the State of the Mediterranean Environment concludes that “in the light of load assessment results...and data related to pollution monitoring in the receiving waters,...the main water body of the Mediterranean Sea is relatively clean and pollution is of concern locally in highly populated coastal areas”.¹⁰⁰ The 1996 Report, on the other hand, concluded that “[t]he Mediterranean continues to be a polluted semi-enclosed sea, quite badly so in certain places at certain times, but perhaps quite moderately so in general.”¹⁰¹

This general conclusion seems, in fact, to reflect more accurately the current state of the Mediterranean marine environment than the earlier ones.¹⁰² In fact, all confined Mediterranean localities adjacent to large urban centres appear to face progressive built-up of pollution, as a result of continued uncontrolled anthropogenic release,¹⁰³ and the region as a whole is subject to intense maritime traffic. And that is despite international efforts at controlling marine pollution from these two main sources, under way in the region for more than two decades, which will be reviewed in the next Chapter.

The envisaged continuation of the pattern of coastal urban expansion will only make the problem of land-based pollution more intense, not only in the North where it is already acute, but also in the developing Southern and Eastern coast of the basin. That brings us to the North-South dimension of the Mediterranean region. Despite a long common tradition of nature exploitation and co-existence, the Mediterranean states have throughout the past also developed political and social divisions, and have often resorted to war. Today there appears to begin a new era of Euro-Mediterranean co-operation that can be used to promote observance of environmental protection standards as will be shown in Chapter 6.

⁹⁹ *Ibid.*, p.326.

¹⁰⁰ See Jestic *et al*, *op.cit.* n.3, p.22.

¹⁰¹ See UNEP, *op.cit.* n.5, p.117.

¹⁰² This is confirmed in EEA, *op.cit.* n.49.

¹⁰³ A reality observed especially in the Bay of Algiers, the “lac de Tunis”, the Bay of Abu-Kir near Alexandria, the Bay of Izmir in Turkey, the North Adriatic and the entire coastal belt along the North coast of Western Mediterranean already since the late 70s, see L.J.Saliba ‘Protecting the Mediterranean - Co-ordinating regional Action’, 2 *Mar.Pol.*, 1978, pp.51-2.

Chapter 2.

THE INTERNATIONAL LAW ON THE PROTECTION OF THE MEDITERRANEAN SEA AGAINST POLLUTION.

This Chapter provides an overview of international environmental law related to marine pollution and applicable in the Mediterranean region to serve as a necessary background for the discussion that is to follow in the next Chapters. This is necessary not only because it provides the indispensable setting for examining the central issue of the present study, i.e. established and emerging mechanisms to ensure compliance with that body of law, but, most importantly, because the extent and content of applicable rules have a direct bearing on whether and how they are complied with, as will be argued in the next Chapter. Moreover, the type of compliance control that international law should put in place also depends on the nature of the set rules as will become apparent in subsequent Chapters.

The second Section of this Chapter goes on to examine the hierarchy between the various norms of international law that are applicable in the present context. This is because rules adopted at different *fora* have to be complementary and consistent in order to allow for all states bound by them to effectively implement them without risking being accused of an international violation. Moreover, regional treaties cross-referring to global rules are particularly important, since they thus create binding obligations for countries which have not chosen to abstain from an environmental regime established in their region, but fail - for whatever reason - to participate in wider international legal arrangements.

2.1. Obligations to Protect and Enhance the Mediterranean Marine Environment.

As was observed in the previous Chapter, the Mediterranean Sea is bordered by three continents and twenty-two states belonging to a multiplicity of legal cultures, international organisations and groupings; hence, international law applicable here is complex and vast. Even in the more restricted field of international environmental law, the same pattern is prevalent. More specifically, global rules - comprehensive and sectoral - referring to the protection of the marine environment from pollution are applicable, sometimes imposing stricter standards for sensitive seas, like the Mediterranean, along with the specific, regional rules, i.e. those of the Mediterranean Action Plan (MAP) system, developed within the Mediterranean Regional Seas Programme under the auspices of the United Nations Environment Programme (UNEP), and consisting of a framework Convention and an ever-increasing series of sectoral Protocols.

Furthermore, co-operation on a continental level has resulted in the establishment of policies and law, those of the European Union (EU) being the principal and more sophisticated, relating to the protection of the marine environment. European Union law (henceforth Community law) encompasses a great range of diverse, environmental instruments, from Action Programmes designating mid-term policy - not endowed with strict, legally binding force - to specific legislation of a procedural or substantive nature and of more or less immediate application in Member States' legal orders. It also contains an abundance of economic rules that indirectly come to have a great bearing on the sea, by regulating economic activities with polluting effects. Other economic co-operation arrangements in Africa and the Middle East have a similar, although much more restricted impact.¹ The European contribution is not limited to Community law, however. There is an additional series of treaties, adopted under the auspices of the UN Economic Commission for Europe (ECE), or the Council of Europe, which regulate a diversity of issues of great importance to the present study.

If it is to be properly understood and implemented, this intricate web of international regulation on the protection of the Mediterranean Sea from pollution has to be viewed as an interdependent whole, a dynamic system, and not a haphazard sum of autonomous elements.² In this context, it must be clarified from the start that the traditional distinction between different international legal rules according to the level at which they have been adopted, i.e. global, regional etc., is not observed in the following Sections. This is because the origin of a rule is not as significant for inducing compliance as the nature and formulation of the obligations contained therein. Hence, international law examined here is divided on the basis of other criteria, such as what kind of substantive or procedural obligation it introduces.

Having said that, the origin of the norms is, by no means, always inconsequential to compliance. Indeed, it will be shown below that Community environmental law tends to present certain characteristics that make its implementation and enforcement more likely. Moreover, as will be argued in subsequent Chapters, the advanced stage of development of the European legal order as such, irrespectively of any specific standard, even allows for a distinct model of compliance control.

Throughout the subsequent discussion, secondary categorisations are also suggested corresponding to some questions critical for present purposes, namely whether an obligation operates at the international/domestic level or at both, on which depends whether an international/national/transnational compliance control system is more suitable; and whether the obligations at hand are incurred by developed states only or by both developed and developing countries - either

¹ See UNEP, *Report of the African Ministerial Conference on the Environment*, Cairo, 16-18 Dec.1985, UNEP/AEC.1/2.

² See A.Kiss & D.Shelton, 'Systems Analysis of International Law: A Methodological Inquiry', XVII *Neth.Y.B.I.L.*, 1986, p.45.

due to the geographical coverage of the instrument in which they are contained or to the substance of the rule - on which the nature of problems those called upon to implement them are likely to face and the type of international response they necessitate largely depend.

The following account does not purport to be exhaustive in the sense that every detail of a particular legal regime is presented; it is rather intended to give a broad picture of the core elements in various areas of international regulation that will enable some general conclusions to be drawn. Moreover, large parts of international environmental law applicable in the Mediterranean area are not touched upon, either because regulated activities are not known to pose a problem for the region, as is the case with production and transport of nuclear energy and matter,³ or because the subject-matter of regulation does not traditionally fall under the marine pollution heading.⁴ Hence, the following discussion is confined to the main bulk of international law traditionally perceived as related to marine pollution, and, especially, to pollution from land-based and maritime activities that have already been identified as the many problems in the region, so as to be manageable.⁵

Accordingly, the principal sets of applicable international standards that will be examined are those contained in global conventions, both general, such as the 1982 United Nations Convention on the Law of the Sea (LOSC), and sectoral, i.e. addressing specific sources of marine pollution, such as the 1972 Convention on the Prevention of Marine Pollution from Dumping of Wastes and Other Matter (London Convention) with regard to dumping; the 1973 Convention for the Prevention of Pollution from Ships (MARPOL) in relation to vessel-generated pollution; and the 1989 Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention) which regulates seaborne movement of hazardous waste.

There are also global agreements addressing the issue of effective response in case of accidental pollution, including the 1969 International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties (1969 Intervention Convention); the 1973 Protocol relating to Intervention on the High Seas in Cases of Marine Pollution by Substances Other than Oil (1973 Intervention Protocol); and the 1990 Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention).

Regional legal regimes are equally, if not more, important. The ones especially pertinent to the Mediterranean region are that under the 1976/1995 'framework' Convention on the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona

³ See *supra* Chapter 1, p.45 and fn.82.

⁴ In that vein, the European regulation of atmospheric pollution in the 1979 ECE Convention on Long-Range Transboundary Air Pollution (Geneva Convention), and the related Protocols, and any relevant Community law and MAP standards (Land-Based Protocol, Annex III) are excluded.

⁵ While acknowledging the current trend to encompass marine pollution under the much wider heading of sustainable development of seas and coastal areas, see *supra*, Introduction, pp.24-5.

Convention/BC); the 1976/1995 Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea (Dumping Protocol); the 1976 Protocol Concerning Cooperation in Combatting Pollution of the Mediterranean Sea by Oil and Other Harmful Substances in Cases of Emergency (Emergency Protocol); the 1980/1996 Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities (Athens Protocol; in its revised form Land-Based Protocol); the 1994 Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (Offshore Protocol); and the 1996 Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal (Hazardous Wastes Protocol).⁶

Continental sectoral regimes will also be reviewed, such as those of the 1991 Convention on the Ban of the Import into Africa and the Control of Transboundary Movement of Hazardous Wastes within Africa (Bamako Convention); the 1992 ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (ECE Transboundary Watercourses Convention); and the 1997 Convention on the Law of Non-Navigational Uses of International Watercourses (International Watercourses Convention).

At Community level, pollution control is regulated in a comprehensive manner in Council Directive 96/61 concerning integrated pollution prevention and control. The principal instruments addressing pollution of Community waters are Council Directive 73/404 relating to detergents; Council Directive 76/160 on the quality of bathing water; Council Directive 79/923 on the quality required of shellfish waters; Council Directive 76/464 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community, and 'daughter' Directives; Council Directive 80/68 on the protection of groundwater. Discharge of urban and industrial waste into the sea is regulated by Council Directive 91/271 on the collection, treatment and discharge of urban and industrial waste, as amended by Directive 98/15. Industrial processes generating waste that might eventually end up in the sea are regulated by Council Directive 78/76 on the disposal of titanium dioxide waste; and Council Directive 75/439 on the disposal of waste oils. Transfrontier movement of hazardous waste is regulated by Council Directive 84/631 on transfrontier shipments of hazardous waste; and Council Regulation 259/93 on the supervision and control of shipments of waste within, into and out of the European Union. Finally, procedural rules for the eventuality of an emergency are found in Council Decision 86/85 on the establishment of a Community information system for the control and reduction of pollution caused by oil spillages of hydrocarbons and other harmful substances discharged at sea or in inland waterways, and Council Directive 93/75 concerning minimum requirements for vessels bound for or leaving Community

⁶ For the sake of completeness, it should be noted that the MAP system is complemented by the 1982/1995 Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean, which, however, is beyond the scope of the present study, see *supra*, Introduction, pp.24-5.

ports and carrying dangerous or polluting goods.

Discussion of the positive law upheld by these instruments begins with substantive obligations, ranging from the very general to the more particular, namely from the duty to formulate policies and programmes and adopt measures to protect and enhance the marine environment to the duty to control/eliminate specific polluting substances and control/ban certain activities. The only procedural obligation operating at the international level examined in this Chapter is the duty to co-operate with a view to protecting the marine environment in cases of emergency. It should be said that these are actually the least significant standards of this nature that will concern this study. A series of other procedural rules closely linked to compliance control at the national or international level are discussed throughout subsequent Chapters. Suffice it here to say that they include co-operation to build capacity in developing states and provide funding for environmental infrastructure (Chapter 6); the duty to submit periodic reports, monitor the marine environment, and co-operate within international organs to follow up implementation of international rules (Chapter 5); the requirement of prior environmental impact assessment; public access to environmental information; and standing in judicial and administrative proceedings (Chapter 8); as well as civil liability standards (Chapter 4).

2.1.1. Duty to Formulate Policies, Programmes and Strategies, and Adopt Measures with a view to Protecting the Marine Environment from Pollution and Enhancing it.

2.1.1.1. LOSC, Arts.192-194.

The cardinal rule found in the main body of environmental provisions of the LOSC (Part XII, Arts.192-237) is the one declaring that “states have the obligation to protect and preserve the marine environment” (Art.192), irrespective of whether it is under their sovereignty and/or jurisdiction or not, and to take all measures necessary “to prevent, reduce and control pollution of the marine environment from any source” (Art.194(1)). These stipulations, but also the whole web of provisions that follow, mirror what has been succinctly described as “a fundamental shift from power to duty as the central controlling principle of the legal regime for the protection of the marine environment”.⁷

Consequently, the traditional ‘freedom of the high seas’, which comprised the freedom to pollute,⁸ no longer exists in this respect.⁹ At the same time, maritime zones under the exclusive jurisdiction of coastal states also fall under the above mandate irrespective of whether pollution thereof has any impact on other states and their environment or on areas beyond national

⁷ A.E.Boyle, ‘Marine Pollution under the Law of the Sea Convention’, 79 *A.J.I.L.*, 1985, p.350.

⁸ The 1958 Convention on the High Seas merely required states to take measures to prevent pollution from oil and dumping of radioactive waste, and to co-operate with a view to prevent pollution from radioactive substances (Arts.24-25). It also reaffirmed the principle of ‘reasonable regard to the interests of other states’ prohibiting in this way abuse of rights; hence, ‘unreasonable’ pollution interfering with other states freedoms might be illegal; see also *Nuclear Tests Case*, 1974 *I.C.J. Reports*, per Judge de Castro, p.390.

⁹ See P.W.Birnie & A.E.Boyle, *International Law and the Environment*, 1992, p.253.

jurisdiction; thus, the absolute sovereignty of states is limited to the extent that they have an independent duty to protect and preserve their own marine environment (Art.193). This groundbreaking duty goes beyond the traditional 'no harm' rule as codified in relation to the environment in Principle 21 of the Stockholm Declaration - which is nevertheless upheld in Article 194(2). The proliferation of general and sectoral treaties on the protection of the marine environment, especially the comprehensive regional ones - whether under the auspices of UNEP's Regional Seas Programme or not -¹⁰, reiterate these precepts. Almost twenty years after their identification and formulation, the LOSC principles still provide the global framework for environmental protection; however, although by now widely acceded to as customary law,¹¹ much remains to be done in terms of further specification and implementation thereof.¹²

Having said that, the LOSC does not have anything substantially new to say in relation to actual implementation of these duties.¹³ It rather entrusts states, individually or collectively, with the task of adopting appropriate measures, using "the best practicable means at their disposal and in accordance with their capabilities" and thus having broad discretion, albeit urging them to consider joint adoption of such measures and harmonisation of their policies (Art.194(1)).

In this context, an important stipulation which usually passes unnoticed is that of Article 195 whereby action to prevent marine pollution must not lead to direct or indirect transfer of damage or hazards from one area to another or transformation of one type of pollution into another. By virtue of it, and although the notion is not expressly incorporated in the Barcelona framework,¹⁴ Mediterranean states are not free to adopt 'anti-pollution' measures that are not genuine, e.g. measures that would reduce discharge of urban or industrial pollutants into the sea by dumping them in sites inadequate to ensure that the soil or groundwater are not contaminated.¹⁵

2.1.1.2. Barcelona Convention, Art.4.

The objective of the revised Barcelona Convention - which constitutes the cornerstone of the legal component of the Mediterranean Action Plan (MAP) - as stated in its preamble is to protect and enhance the marine environment in the region, taking into account its special characteristics and particular vulnerability, and appreciating its value and the Parties' own "responsibility to preserve

¹⁰ Covering almost all marine regions, i.e. the Mediterranean, the North-East Atlantic, the Baltic, the Arabian Gulf, West and Central Africa, the South-East Pacific, the Red Sea and the Gulf of Aden, the Caribbean, Eastern Africa, the South Pacific, the Black Sea, and the East Asian region.

¹¹ See among others, Boyle, *op.cit.* n.7, pp.347-72; B.Kwiatkowska, *The 200-Mile EEZ in the New law of the Sea*, 1989, Chapter 5; J.Norton Moore, 'Customary International Law after the Convention', in R.B.Kruger & S.A.Riesenfeld (eds.), *The Developing Order of the Oceans* (Law of the Sea Institute Eighteenth Annual Conference Proceedings), 1985, p.43; W.L.Schachte Jr., 'The Value of the 1982 UN Convention on the Law of the Sea: Preserving Our Freedoms and Protecting the Environment', 23 *O.D.I.L.*, 1992, p.59; and Birnie & Boyle, *op.cit.* n.9, pp.254-5.

¹² See, e.g. Boyle, *op.cit.* n.7, p.357.

¹³ For a more detailed discussion, see *infra* Chapter 7, pp.296-7.

¹⁴ Cf. Art.5(2) of the 1986 Convention for the Protection of the Natural Resources and Environment of the South Pacific Region; and Art.2(4) of the 1992 Paris Convention.

¹⁵ On the relevant EC Directive on integrated pollution control, see *infra*, pp.67-9.

and sustainably develop this common heritage for the benefit and enjoyment of present and future generations". The basic undertaking to that effect is to take individual or collective appropriate measures "to prevent, abate, combat *and to the fullest possible extent eliminate* pollution... and to protect and enhance the marine environment...";¹⁶ so as to contribute towards sustainable development of the region (Art.4(1)). Furthermore, in the 1995 revision, the Parties laid down certain principles to guide adoption of such measures: They agreed to apply the 'precautionary principle', in accordance with their capabilities; as well as the 'polluter pays' principle; to undertake environmental impact assessments for proposed activities, and co-operate in relevant procedures when appropriate; and to promote integrated management of the coastal zones (Art.4(3)).

It is also specified that relevant programmes and measures must "contain, where appropriate, time limits for their completion", that "best available techniques and best environmental practices" must be utilised, and environmentally sound technology, including clean production methods must be promoted (Art.4(4)).¹⁷ The Parties have, moreover, agreed to "co-operate in the formulation and adoption of protocols...prescribing agreed measures, procedures and standards for the implementation of [the] Convention" (Art.4(5) and 21).

One must, at this point, put the above undertakings in context: Already from its inception in 1976, the overall legal approach of the Barcelona Convention is described as a 'framework' system, lying somewhere between the comprehensive (Baltic Sea) and the piecemeal (North-East Atlantic) ones.¹⁸ Like the 1974/1992 Helsinki Convention, it comprises a general, all-encompassing, 'umbrella' agreement; but unlike it, implementation and elaboration of specific provisions are not left to technical annexes forming an integral part of the instrument. Under the Barcelona Convention detailed regulations are to be adopted through sectoral Protocols and their Annexes, independent from each other, similar to the instruments of the early North-East Atlantic system,¹⁹ in the sense that each Protocol is only binding on its parties (BC, Art.29(2)), which are additionally empowered to take any relevant decisions (Art.29(3)). On the other hand, the framework Convention is related to the Protocols, since no-one may become party to the Convention without becoming party to at least one of the Protocols, and vice versa (Art.29(1)).

Although all possibilities were considered in the preliminary inter-governmental

¹⁶ Italics denote formulations inserted at the 1995 revision of the Barcelona Convention and Protocols. These instruments are not yet in force.

¹⁷ It must, however, be noted that an Italian proposal to attach an Annex to the BC that would lay down criteria for the definition of Best Available Techniques and Best Environmental Practice was rejected, see UNEP, Report of the Meeting of Legal and Technical Experts to examine amendments to the Barcelona Convention, the Dumping Protocol and the Specially Protected Areas Protocol, UNEP(OCA)/MED WG.91/7, 1 March 1995, p.4.

¹⁸ J.A de Yturriaga, 'Regional Conventions on the Protection of the Marine Environment', 162/1 *Receuil des Cours*, 1979, p.336-40.

¹⁹ See, e.g., 1974 Paris Convention; 1972 Oslo Dumping Convention; and 1969 Agreement for Co-operation in dealing with Pollution of the North Sea by Oil and Other Harmful Substances.

consultations,²⁰ and the need for comprehensive regulation of all forms of pollution was acknowledged, in 1976 it was too early for everybody - in view of the great diversity of countries - to assume detailed obligations on all polluting sources. According to Bliss-Guest, a system less onerous than one in which all obligations are contained in a single agreement, with a take-it-or-leave-it implication, might be the only way to give adequate recognition to the diverse national political constraints upon the adoption of new international obligations, and is particularly important in regions containing both developed and developing states, as it allows negotiation and implementation of technical regulations by those best suited to the task - presumably scientists. This approach also helps build consensus, since Parties' self-assurance increases with each successive agreement, and allows for partial revocation if circumstances so require.²¹ Thus, the legal content of the system is not static but - potentially - ever evolving, a possibility acknowledged and sanctioned from the very beginning.

In view of the broad wording - as will be shown more clearly below - of the Convention's substantive provisions, most notably "to take all appropriate measures", the not rare qualifications inserted, e.g. "as far as possible", and the weakness of some operative phrases, e.g. "shall endeavour to", it would *prima facie* seem that "the Barcelona Convention is a skeletal document which places no specific duties on the contracting parties".²² However, the Convention is neither a legal text devoid of meaning nor a political statement of will. To be properly understood, it must be seen in context, i.e. as the constituent instrument - in many aspects a 'non self-executing' one -²³ of a single normative system,²⁴ containing protocols and other legal norms with increasing prescriptive concreteness.²⁵ In this connection, along with the general principles of that system and the general duty of article 4(1), as was already noted, the Convention imposes on its Parties a duty *de contrahendo* in Article 4(5) - irrespectively of whether this is in theory a duty to actually conclude agreements or a duty to negotiate them in good faith -, which Parties began fulfilling simultaneously with the adoption of the Convention through conclusion of the first two Protocols.

An interesting analytical approach is that of Professor Raftopoulos who argues that the Barcelona Convention system is

²⁰ See de Yturriaga, *op.cit.* n.18, p.338-9, where it is reminded that the piecemeal approach had been attempted twice without success, namely at the 1972 Neuilly Conference, where Western Mediterranean states failed to approve an Agreement concerning Co-operation in Dealing with Oil Pollution of the Waters of the Mediterranean, and the 1972 Rome Conference, where a preliminary draft Convention for the Prevention of Pollution in the Mediterranean by Dumping from Ships and Aircraft was never finalised.

²¹ P.A.Bliss-Guest, 'The Protocol against Pollution from Land-Based Sources: A Turning Point in the Rising Tide of Pollution', 17 *Stanford J of Int'l L.*, 1981, pp.267 and 279.

²² D.de Hoyos, 'The United Nations Environment Program: The Mediterranean Conferences', 17 *Harv.I.L.J.*, 1976, p.643.

²³ On the issue of 'self-executing' provisions of international law, see *infra*, Chapter 7, pp.309-10.

²⁴ U.Leanza, 'The Regional System of Protection of the Mediterranean against Pollution', in U.Leanza (ed.), *The International Legal Regime of the Mediterranean Sea*, 1987, p.397.

²⁵ *Ibid*, p.398.

“a complex legal and institutional phenomenon,... constitutive of an international environmental order developing diachronically rather than synchronically and contextually rather than in isolation from its relational foundation.”²⁶

He submits that such systems generate an ‘international trust’ on their subject-matter - with coastal states acting as ‘regional environmental trustees’ and the international community through UNEP and other organizations involved as assisting ‘relational trustees’ - through *quasi*-legislative instruments, such as the Barcelona Convention and Protocols.²⁷

Thus,

“each Contracting Party retains a degree of discretion regarding its conduct vis-a-vis the adoption of an additional Protocol. Yet its discretion is as to ‘when’ rather than as to ‘whether’ it will adopt...[it]... As a... Party, a [s]tate is, therefore, attributed a relational status and its membership is, as a result, based on a relational consensus... [which] refers to all aspects of the relation... and it covers, in effect, all the implementing Protocols which are to be gradually established....”²⁸

That said, the stipulations of both the LOSC and the Barcelona Convention discussed so far, however categorical, are still very general. They may acquire concrete meaning susceptible to legal control only if read together with the following.

2.1.2. Duty to Control/Eliminate Specific Polluting Substances and Control/Ban Specific Polluting Activities - Land-Based Pollution.

2.1.2.1. LOSC (Arts.207, 212) and Other International Instruments.

The LOSC imposes on states a general obligation to control all sources of marine pollution (Art.194(3)). In particular, they have to adopt legislation and take other appropriate measures “to prevent, reduce and control pollution... from land-based sources, including rivers, estuaries, pipelines and outfall structures, taking into account internationally agreed rules, standards and recommended practices and procedures” (Art.207(1) and (2)).

Notwithstanding reference to international standards on land-based pollution, it is widely conceded that this field of positive international environmental law is still rather under-developed.²⁹ As there is no binding global instrument dealing with the substance of land-based control regulations, the Athens Protocol examined below, together with the 1974 Paris and Helsinki Conventions, have served as models for the formulation of the Montreal Guidelines for the Protection of the Marine Environment against Pollution from Land-based Sources that were designed to serve as a ‘checklist’ of basic provisions for national measures, for future agreements

²⁶ E.Raftopoulos, *The Barcelona Convention and Protocols: The Mediterranean Action Plan Regime*, 1993, p.42.

²⁷ See E.Raftopoulos, ‘The Barcelona Convention System - An International Trust at Work’, 7(1) *I.J.E.C.L.*, 1992, pp.27-41.

²⁸ Raftopoulos, *op.cit.* n.26, p.48.

²⁹ See P.Sands, *Principles of International Environmental Law*, Vol.I, 1995, pp.318-25 and 339.

and for “the preparation in the long term, should the need arise, of a global convention”,³⁰ comprising in some respects more specific and comprehensive obligations than those in the then-existing international instruments.³¹ Increasing realisation of the seminal role that reduction of land-based discharges plays if an effective regime of marine environmental protection is to be brought about,³² provoked extensive discussion on the desirability of a global instrument - of ‘hard’ or ‘soft’ nature - that would authoritatively assert the relevant international law and would encourage states not committed to any regional rules to engage in regulating these sources of marine degradation.³³

All this activity culminated in the Washington Conference, held in late 1995, where the choice of a ‘soft’ instrument, the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities, was confirmed in view of the great divergence of land-based pollution problems and relevant management and regulation exigencies in different parts of the world. In fact, the Global Programme of Action is designed to be a source of conceptual and practical guidance to be drawn upon by principally national, as well as regional, authorities in devising and implementing sustained action to prevent, reduce, control, and/or eliminate marine degradation from land-based activities. In this vein, it adopts a comprehensive approach inspired by Agenda 21 and the notion of sustainable development; it pays particular attention to integrated management; as well as to the particular significance of capacity-building and funding, especially as far as developing states are concerned, in the effective attainment of the stated objectives; and it, additionally, recommends a series of detailed targets for most categories of land-based pollution sources.

Turning now to the most important carriers of land-based pollution, namely rivers, it must be noted that, in the past, there has been no strict duty under customary or conventional international law to prevent pollution of the sea originating from international watercourses, nor a stringent duty to protect the environment of the watercourse itself, for that matter.³⁴ The 1992 ECE Transboundary

³⁰ See UN, Preparatory Committee for the UN Conference on Environment and Development, Land-based Sources of Marine Pollution, Report of the Secretary-General of the Conference, UN Doc. A/CONF/151/PC/71, 17 July 1991, pp.37 *et seq.*, for a review of measures taken by individual countries in implementation of the Montreal Guidelines.

³¹ See, for example, Guideline 12 on prior environmental impact assessment; Guideline 9 on assistance to developing countries; and Guideline on equal access to national remedies, including compensation for damage. See also R.M.M’Gonigle, “Developing Sustainability” and the Emerging Norms of International Environmental Law: The Case of Land-Based Marine Pollution Control’, 1990 *Can.YB.I.L.*, pp.202-3; and A.E.Boyle, ‘The Law of the Sea and International Watercourses - An Emerging Cycle’, 14(2) *Mar.Pol.*, 1990, p.154.

³² See, for example, GESAMP, *The State of the Marine Environment, Regional Seas Reports and Studies*, No.115, UNEP, 1990, for an authoritative statement of the major sources of marine pollution; and M’Gonigle, *op.cit.* n.31, pp.170 and 172.

³³ See Birnie & Boyle, *op.cit.* n.9, pp.317-20; and especially Preparatory Commission for the UN Conference on Environment and Development, *op.cit.* n.30, pp.19-36, where all options for such an instrument are considered, pursuant to Resolution 40(13) of the Consultative meeting of the London Convention calling for a global instrument and improved regional agreements on land-based pollution.

³⁴ For example, the 1976 Convention for the Protection of the Rhine against Chemical Pollution provides that measures adopted shall take, *inter alia*, into account ‘the need to preserve an acceptable quality of sea water’, Art.1(2)(g). On this problem, see S.Burchi, ‘International Legal Aspects of pollution of the Sea from Rivers’, 3 (continued...)

Watercourses Convention introduced, for the first time, a specific obligation of environmental protection independent from equitable utilisation considerations (Art.2(1)). However, and despite explicit reference in the Preamble of the need to prevent pollution of the marine environment from land-based sources, there is no further elaboration of relevant rules. Still, this instrument is important for present purposes, to the extent it dictates specific obligations to prevent, control and reduce pollution in international rivers that ultimately reaches the sea, and in explicitly turning access to relevant information into a public right (Art.16), which might be of significance in order to trace damage to the marine environment back to a particular source.

The recent 1997 International Watercourses Convention goes even further; it reaffirms the duty to “take all appropriate measures to prevent the causing of significant harm” to other states (Art.7(1)),³⁵ and, furthermore, creates an obligation for its parties to individually or jointly, “take all measures... that are necessary to protect and preserve the marine environment, including estuaries, taking into account generally accepted international rules and standards” (Art.23).³⁶ Although it is too soon to assess whether this explicit obligation would eventually pass into custom and apply to all riparians wherever they might be, already today the independent obligation to protect the seas and prevent pollution as expressed in the LOSC is globally binding, which arguably implies that all states are obliged - when acting as riparians - to respect this duty, even when the river in question is running entirely within national boundaries.

2.1.2.2. Barcelona Convention (Art.8) and Athens Protocol.

The Parties of the Barcelona Convention are required to “take all appropriate measures to prevent, abate, combat *and to the fullest possible extent eliminate*” land-based pollution, and to “draw up and implement plans for the reduction and phasing out of substances that are toxic, persistent and liable to bioaccumulate”, covering effluents from rivers, coastal establishments or outfalls, or emanating from any other land-based sources within their territories, *including those transported by the atmosphere* (Art.8). In discharge of this obligation and after many years of negotiations,³⁷ the Parties concluded the Athens Protocol.³⁸

³⁴(...continued)

Ital.YB.I.L., 1977, pp.115-142; Boyle, *op.cit.* n.29, p.151-7.

³⁵ For a discussion of the main provisions of the Convention, see S.C.McCaffrey & M.Sinjela, ‘The 1997 United Nations Convention on International Watercourses’, 92 *A.J.I.L.*, 1998, pp.97-107. Especially on the controversial Article 7, see pp.100-2..

³⁶ For a critique of the substance and value of the Convention from a ‘sustainable development’ viewpoint, see E.Hey, ‘The Watercourses Convention: To what Extent does it Provide a Basis for Regulating Uses of International Watercourses’, 7(3) *R.E.C.I.E.L.*, 1998, pp.291-300.

³⁷ One year previous to its conclusion, a document produced by the Meeting of Legal and Technical Experts on the Draft Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources, entitled Preliminary draft Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources - Comments on the inventory of areas of disagreement, UNEP/WG.17/5, 9 April 1979, was covering 40 pages of comments on various formulations, ranging from whether the protocol would include internal waters in its geographical (continued...)

The Athens Protocol divides polluting substances into two groups. Annex I substances are to be eliminated (Art.5(1)).³⁹ To this end, the Parties have to elaborate necessary programmes and measures (Art.5(2)), in particular common emission standards and standards for use (Art.5(3)). These standards as well as time-tables for their implementation are to be fixed and periodically reviewed (Art.5(4)).⁴⁰ Annex II substances, on the other hand, are only to be 'strictly' limited and subject to an authorisation issued by the competent national authorities, that takes due account of the provisions of Annex III, i.e. the characteristics and composition of the waste; its harmfulness (persistence, toxicity, accumulation etc); the characteristics of the discharge site and of the receiving marine environment; the availability of waste technologies; and the potential impairment of marine ecosystems and sea-water uses (Art.6).⁴¹

Thus, two different approaches are used, depending on the nature of the substance: uniform emission standards for the more noxious ones and environmental quality objectives for the rest.⁴² Although more difficult to apply at the national level, where much specific scientific information and skilled planners would be indispensable, the latter allows for flexibility, as it gives less industrialised states the possibility to adopt less stringent regulations, exactly because their waters carry less pollution loads than those of the industrialised North. If taken to its extreme implication, this could mean that, should a particular water body satisfy the quality objectives, the state concerned would be under no obligation to regulate polluting activities at all.

Now, measures and programmes referred to in Articles 5 and 6 are to be decided in the

³⁷(...continued)

coverage to what is actually meant by 'land-based pollution' and to whether special assistance should be granted to developing countries. See also UNEP, Report of the Meeting of Legal Experts on the preliminary draft Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources, UNEP/ WG.17/6, 9 July 1979, pp.2-5, for relevant reservations of various countries; and J.-P.Dobbert, 'Protocol to Control Pollution in the Mediterranean', 6 *Env'l Pol.& L.*, 1980, p.110, for some comments on the preparatory work.

³⁸ See, among others, S.Kuwabara, *The Legal Regime for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources*, 1984; P.A Bliss-Guest, *op.cit.* n.21, p.261; G.J.Timagenis, 'Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources', 1(1) *Hellenic Rev. of Int'l Relations*, 1980, p.123; K.W.Goering, 'Mediterranean Protocol on Land-Based Sources: Regional Response to a Pressing Transnational Problem', 13 *Cornell I.L.J.*, 1980, p.329.

³⁹ Substances contained here are: organohalogen, organotin and organophosphorus compounds; mercury, cadmium and their compounds; used lubricating oils, persistent synthetic material; substances having proven carcinogenic, teratogenic or mutagenic properties; and radioactive substances and wastes, when their discharges do not comply with the principles of radiation protection as defined by the competent international organizations. Despite absolute proscription of these materials, the parties may define limits below which discharges are permitted (Annex I (B)).

⁴⁰ The Protocol was to be fully implemented by 1995, see UNEP, Report of the Fifth Meeting of the Contracting Parties to the Barcelona Convention and its Related Protocols, UNEP/IG.74/5, 28 September 1987, p.32.

⁴¹ Substances included here are: zinc, copper, nickel, chromium, lead, selenium, arsenic, antimony, molybdenum, titanium, tin, barium, beryllium, boron, uranium, vanadium, cobalt, thallium, tellurium, silver and their compounds; biocides; crude oils and hydrocarbons of any origin; cyanides and fluorides; non-biodegradable detergents; compounds of phosphorus; pathogenic micro-organisms; thermal discharges; substances that have a deleterious effect on the taste and/or smell of aquatic products and the oxygen content of the water etc.(Annex II(A)).

⁴² See A.Wolf, *Quotas in International Environmental Agreements*, 1997, pp.111-5; P.Sands, *op.cit.* n.29, pp.127-8; and Bliss-Guest, *op.cit.* n.21, pp.273-4.

Meeting of the Parties.⁴³ However, if a Party is “not able to accept” a programme or measure - which implies that decisions are not binding on the minority -⁴⁴ it has to inform the Meeting of the action it intends to take on the matter, and may at any time give its consent to the adopted programme or measure (Art.15(2)). Moreover, the Parties are under an obligation to progressively formulate and adopt, in co-operation with the competent international organisations, common guidelines and standards or criteria dealing with the length, depth and position of pipelines for coastal outfalls; special requirements for effluents necessitating separate treatment; the quality of sea-water used for specific purposes that is necessary for the protection of human health, living resources and ecosystems; the control and progressive replacement of products, installations and industrial and other processes causing significant pollution of the marine environment; and specific requirements concerning quantities of substances listed in the Annexes, their concentration in effluents and methods of discharging them (Art.7(1)).

So far, this obligation has been executed through the adoption of *interim* environmental quality criteria for bathing waters (1985); *interim* environmental quality criteria for mercury (1985); measures to prevent mercury pollution (1987); environmental quality criteria for shellfish waters (1987); measures for control of pollution by used lubricating oils (1989); measures for control of pollution by cadmium and cadmium compounds (1989); measures for control of pollution by organotin compounds (1989); measures for control of pollution by organohalogen compounds (1989);⁴⁵ measures for control of pollution by organophosphorus compounds (1991); measures for control of pollution by persistent synthetic materials (1991); measures for control of radioactive pollution (1991); measures for control of pollution by pathogenic micro-organisms (1991);⁴⁶ and lastly, measures for control of pollution by carcinogenic, teratogenic and mutagenic substances (1993);⁴⁷ while common measures for zinc, copper, and anionic detergents are currently being elaborated. More significantly, in 1993, the Parties adopted a Recommendation whereby inputs of toxic, persistent and bioaccumulative substances into the marine environment, in particular organohalogen compounds must be reduced and phased out by the year 2005.⁴⁸

All these different decisions vary considerably and range from banning, e.g, the use of organotin compounds on hulls of boats less than 25m long and on all structures, equipment or

⁴³ Cf. 1992 Helsinki Convention, Annex III setting out specific criteria and measures from the outset, and especially Reg.2(1) requiring at least biological (secondary) treatment of municipal waste.

⁴⁴ On this point see also *infra*, Chapter 5, pp187-8.

⁴⁵ UNEP, Common Measures adopted by the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution, *MAP Technical Reports Series*, No.38, 1990.

⁴⁶ See UNEP, Report of the Seventh Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols, UNEP(OCA)/MED IG.2/4, 1991, Annex IV, pp.18-24.

⁴⁷ *Ibid*, p.7.

⁴⁸ UNEP, Report of the Eighth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols, UNEP(OCA)/MED IG.3/5, 15 October 1993, p.5.

apparatus used in mariculture, to concrete measures to prevent mercury pollution. More specifically, there is a precise obligation to ensure a maximum concentration (to be calculated as a monthly average) of 50mg mercury per litre for all effluent discharges before dilution into the Mediterranean Sea, to pursue enforcement through compulsory monitoring requirements and procedures, and to ensure that outfalls for new discharges of mercury into the sea would be designed and constructed in such a way as to achieve a suitable effluent dilution in the mixing zone so that the increase from the outfall structures will not be more than 50% above background levels.⁴⁹ In the latter case, existing discharges are to be adjusted as to progressively achieve these objectives within a period of 10 years.

On the other hand, quality criteria for shellfish waters lay down the minimum common requirements in relation to concentrations, sampling frequency, and analytical and interpretation methods, while, at the same time, they allow for other complementary measures as may be demanded by national or local circumstances, and urge Parties to include, to the extent possible, all shellfish waters in their national monitoring programmes. As far as used lubricating oils are concerned, the standards are mere guidelines, e.g. that wastes containing such oils should not be discharged directly or indirectly into the sea, and that the Parties undertake to progressively implement programmes and measures to realise that principle, through appropriate national procedures, taking into account the various techniques available, i.e. recovery, regeneration for re-use or burning as fuel, or treatment and disposal in specially designed units. Nevertheless, in this instance, these general requirements are coupled with a specific time limit for the definite elimination of such direct or indirect discharges into the marine environment, namely the 1st of January 1994, which, although leaving much room to decide on individual domestic policies, is binding as to the time the objective has to be achieved, and thus resembles Community Directives.⁵⁰

Finally, noteworthy are the measures for control of pollution by persistent synthetic materials to the extent they directly import MARPOL into the Barcelona system;⁵¹ in fact, there are no specific substantive standards established, merely an instruction that all countries ratify Annex V of MARPOL and install the necessary facilities for reception of garbage from vessels at all ports, anchorages and marinas so that the provisions of Annex V for special areas apply to the Mediterranean as soon as possible.

It seems that Mediterranean states, recognising the major contribution of land-based sources to overall pollution of the sea, have an ambitious scheme which, if applied, would bring about, along with significant reduction of pollution, substantial changes to economic and social patterns of production and consumption, what would in effect be a substantial move towards sustainable

⁴⁹ Similar are the measures for cadmium and its components.

⁵⁰ See *infra*, pp.69-71.

⁵¹ On MARPOL, see *infra*, pp.80-2.

development in the region. This is the reason why this Protocol is the only one in the Barcelona system implicitly accepting that Northern states contribute far greater quantities of hazardous material from their economic and other activities, recognising "the difference in levels of development between the coastal states, and [taking] into account the economic and social imperatives of the developing countries" (Preamble). Consequently:

Article 7(2). "...such common guidelines, standards or criteria shall take into account local, ecological, geographical and physical characteristics, the economic capacity of the Parties and their need for development, the level of existing pollution and the real absorptive capacity of the marine environment."

Article 7(3). "The programmes and measures referred to in articles 5 and 6 shall be adopted by taking into account, for their progressive implementation, the capacity to adapt and reconvert existing installations, the economic capacity of the Parties and their need for development."

Although these qualifications might seem to undermine the substantive, categorical undertakings, as these are in practice postponed until they become less disruptive economically,⁵² they should be read in context. Firstly, it is important to have a regional instrument purporting to control land-based sources of pollution. Such instruments, as already mentioned, are rare exactly because of their far-reaching implications - among other reasons, exactly because they restrict activities on land where perceptions of national sovereignty are still predominant - and great costs involved.⁵³ Secondly, northern littorals are, indeed, the ones that have to act without delay with a view to minimising their effluents. And lastly, as developing states are still committed by the Protocol and may not ignore their duty to control land-based sources, the crucial stake is to give them appropriate incentives to conform with early time-tables and high standards. It is submitted that the cautious formulation of binding rules is preferable to early hard-and-fast, all-encompassing ones, exactly because the latter run too much the risk of remaining dormant until they become cost-effective or feasible for each country. In this context, the statement of the Turkish delegation in relation to common measures to be adopted concerning organotin compounds, whereby the proposed date of implementation would be too early since Contracting Parties were still lacking information on commercially available alternative compounds, is characteristic.⁵⁴

This discussion cannot be complete without reference to the fact that the Athens Protocol has recently undergone a substantial revision. Negotiations were, not surprisingly, again complicated and lengthy. The central issues debated were the introduction of the concept of 'hydrological basin', which would permit extended inland catchment areas to be covered by the Protocol; the introduction of specific target dates for the elimination of certain substances; the inclusion of a long series of polluting activities as priority areas for regulation, alongside substances; and the innovatory

⁵² For relevant critical views, see M'Gonigle, *op.cit.* n.31, pp.190-1.

⁵³ See *infra*, Chapter 6, p.241-2.

⁵⁴ UNEP, Report of the Sixth Ordinary Meeting of the Contracting Parties to the Barcelona Convention and its Related Protocols, UNEP(OCA)/MED IG.1/5, 1 November 1989, p.9.

introduction of a requirement to put in place regional programmes with specific measures and timetables for the reduction of certain priority substances, obligatory for Parties that do not opt out within sixty days from adoption.⁵⁵

The revised Land-Based Protocol - which nevertheless is not yet in force - has in fact extended the scope of application to cover the whole hydrological basin of the Mediterranean (Art.3(b)); it abolishes division of substances in separate lists, and introduces the obligation to eventually phase out the most dangerous among them instead (Art.5(1) and Annex IC);⁵⁶ it provides for regional programmes of action for its implementation, with priority to be given to substances that are toxic, persistent and liable to bioaccumulate, as well as to water treatment and management (Art.5(2)); and introduces the precautionary principle, the polluter pays principle, the principle of prior environmental impact assessment (Preamble), and of 'best available techniques' and 'best environmental practices' (Annex IV). But the most significant change appears to be an explicit requirement for the establishment of authorisation or regulation systems in each country to which point source discharges and releases into water or air that reach and may affect the Mediterranean Sea are to be "strictly subject", and which are to include inspection procedures to assess compliance as well as appropriate sanctions (Art.6).⁵⁷ It is this aspect of the new Protocol that has the most potential of making some real difference in the future and that bears some similarities to the Council Directive on integrated pollution control that we will now turn to.

2.1.2.3. Council Directive 96/61 on Integrated Pollution Prevention and Control.⁵⁸

After three years of gestation, and building on the experience of national integrated pollution control systems in several countries of Europe and North America and on a relevant OECD Recommendation,⁵⁹ the Council adopted Directive 96/61 in October 1996. This instrument is very significant - arguably the most important piece of Community legislation in the area of pollution control - since it establishes an overall framework which will have a bearing on most sectors of industrial activity in Member States, in which environmental considerations will in the

⁵⁵ See UNEP, Report of the Meeting of Legal and Technical Experts to Examine Amendments to the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources, UNEP(OCA)/MED WG.92/4, 11 May 1995.

⁵⁶ Note also the Strategic Action Programme to address pollution from land-based activities adopted at the 1997 Meeting of the Parties which, albeit in a soft form, establishes target years for full elimination of input of a wide array of substances, see UNEP, Report of the Tenth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, Tunis, 18-21 November 1997, UNEP(OCA)/MED IG.11/10, 3 December 1997, Annex IV, Appendix II.

⁵⁷ In the above Strategic Action Programme it is specified that, by the year 2000, such an authorisation system for new installations as well as a comprehensive inspection regime should be in place in each country, see *ibid.* pp.42-4.

⁵⁸ See L.Krämer, *Focus on European Environmental Law*, 1997, Chapter 11; and C.Backes & G.Betlem (eds.), *Integrated Pollution Prevention and Control*, 1999.

⁵⁹ See N.Haigh & F.Irwin (eds.), *Integrated Pollution Control in Europe and North America*, 1990; and OECD, *Integrated Pollution Prevention and Control, Environment Monograph*, No.37, Paris, 1991. On the Recommendation see also N.Emmott & N.Haigh, 'Integrated Pollution Prevention and Control: UK and EC Approaches and Possible Next Steps', 8(2) *J.of Env'l L.*, 1996, pp.301-2.

future have to be tightly integrated. The rationale underlying this development rests in the realisation that sectoral regulation of pollution controlling emissions into the air, water or soil has in the past rather encouraged the shifting of pollution between the various media rather than achieving a high level of protection for the environment as a whole (Recitals 7 and 8).⁶⁰

Accordingly, the Directive aspires to prevent, or at least reduce emissions in all media from an array of highly polluting activities, including energy industries, metal installations and the mineral industry, waste management plants etc. (Art.1 and Annex I). To this effect, Member States will have to ensure that these installations operate in such a way that all the appropriate preventative measures are taken; that no significant pollution is actually caused; that waste production is avoided, and energy is used efficiently; that accidents are prevented and their effects mitigated; and, finally, that after cessation of the activity any pollution risk is prevented (Art.3).

More specifically, the competent authorities have to see that "no new installation is operated without a permit" (Art.4), issued after application by the interested party, and upon a co-ordinated consideration by all authorities concerned of the necessary environmental conditions (Arts.6-8), such as emission limit values, generally based on 'best available techniques' (Arts.9(3) and (4) and 10, and Annex IV), and any other condition the authorities deem fit (Art.9(7)). In this connection, Member States may prescribe specific requirements for certain categories of installations in "general binding rules", instead of including them in individual permits (Art.9(8)), as they are likely to have done for all the industrial sectors already regulated under the earlier Directives examined below. However, this does not mean that Member States are relieved from the duty to take into account the technical characteristics of a particular installation or local environmental conditions when setting permit conditions.⁶¹ To this effect, it is envisaged that the Council will eventually set Community-wide emission limit values for the categories of installations covered by the Directive, and the principal polluting substances involved ((Art.18(1)). In the absence of such Community standards, limit values contained in a series of relevant Community instruments are to be applied as minimum standards for the said installations (Art.18(2)). Furthermore, permit conditions are to be periodically reconsidered and updated, in particular when changes in the operation of the installations concerned are planned, or when new and relevant Community or national legislation is introduced (Arts.12-13). Existing installations are also required to eventually adapt to the same standards by 2008 (Art.5).

The Directive had specified a three year time-limit in which Member States will have to adapt their legal and administrative systems in order to comply with the former's stipulations

⁶⁰ See also *supra*, p.57.

⁶¹ See 'IPPC Directive Adopted, IPCC on Small Firms on the Way', 261 *ENDS Report*, October 1996, p.38.

(Art.21(1)),⁶² which expired at the end of 1999, and the first comprehensive report on its implementation is expected only in 2002.

2.1.2.4. Water Directives.

Until then, however, Directives already regulating water pollution remain the primary instruments that address degradation of the marine environment in Mediterranean Member States.⁶³ The first such instrument aiming at protecting fresh and salt water was:

- Council Directive 73/404 prohibiting the placing on the market and use of detergents where the average level of biodegradability of certain surfactants contained therein is less than 90% tested by prescribed methods. Amending instruments introduced a number of exceptions for certain categories of products due to technical problems and undesirable effects on health and the environment of detergents with the fixed biodegradability limits.

A substantial number of other pieces of Community legislation followed. The most significant are:

- Council Directive 76/160 laying down several physical, chemical and microbiological parameters for the quality of bathing water and establishing a system of monitoring bathing water quality in Member States. The relevant parameters are set out in an Annex and include mandatory and guiding ones. An indication of the difficulties in achieving waters as clean as the Directive requires is the ten year period in which compliance with the set standards should have been reached, and the allowance for further derogations beyond that limit.
- Council Directive 79/923 on the quality of coastal and brackish waters designated by Member States for the support of shellfish life and growth. Pursuant to it, Member States must set up pollution reduction programmes to bring waters into conformity with imperative values of quality within six years of their designation and endeavour to observe guide values of quality.
- Council Directive 76/464 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community. This is a 'framework' Directive aiming at the elimination or reduction of the pollution of inland, coastal, and territorial waters by particularly dangerous substances, comprised in Lists I and II of the Annex.

List I substances, which are the most hazardous, are subject to a prior authorisation limited in time and containing emission limit values restricting the maximum concentration and quantity of the matter allowed to be discharged, that have to be at least as restrictive as the emission limit values to be adopted at Community level. Alternatively, a Member State may establish water quality objectives, if it can prove that these are being met and continuously maintained. List II substances are to be controlled by pollution reduction programmes drawn up by Member States, and including

⁶² Whereas existing installations should be brought into conformity with the requirements of the Directive by 30 October 2007.

⁶³ See generally, L.Krämer, *E.C. Environmental Law*, 4th ed., 2000, Chapter 7.

prior authorisation and compliance with emission standards based on quality objectives to be issued by the Community.

Implementing or 'daughter' Directives adopted so far are Council Directives 82/176 and 84/156, laying down emission limit values and water quality objectives for mercury; Council Directive 83/513, for cadmium; Council Directive 84/491, for hexachlorocyclohexane (HCH); Council Directive 86/280, for carbon tetrachloride, DDT and pentachlorophenol which provides for acceleration of the process initiated by Directive 76/464. It is sufficient to amend this latter instrument's Annexes in order to regulate other substances. That is what Council Directive 88/347, for aldrin, dieldrin, endrin, isodrin, hexachlorobenzene, hexachlorobutadiene and chloroform, and Council Directive 90/415, for dichloroethane, trichloroethylene, perchloroethylene and trichlorobenzene, do. On the other hand, instruments on List II substances have not yet been adopted. In fact the process of adopting standards for other harmful substances as well as the follow-up work for the implementation of the 'daughter' Directives has come to a standstill since the early 90s for reasons that are far from clear.⁶⁴

- The newest instrument that regulates the input of harmful substances into the sea is Council Directive 91/676 concerning the protection of waters against pollution caused by agricultural sources. Pursuant to it Member States had to designate vulnerable areas in their territories, mainly those with eutrophic waters, and to subsequently establish action programmes to improve their quality. The Directive specifies some of the measures that have to be taken in this context, e.g. the prohibition of use of certain fertilizers for certain periods and the establishment of a code of "good agricultural practice" to be implemented by farmers on a voluntary basis. Again, by the end of the transposition period (1993) very few countries had done anything to implement these norms and by 1997 many cases had been brought before the ECJ, including against Greece and Italy.⁶⁵

By regulating discharges into fresh water and ensuring its quality,⁶⁶ one ultimately protects the marine environment where fresh water ends up via rivers and groundwater paths. In this context,

- Council Directive 80/68 introduces a comprehensive scheme for the protection of groundwater and substitutes the relevant article of Directive 76/464. It instructs Member States to prohibit all direct discharges of substances on List I of the Annex, and to subject any disposal or tipping that might lead to indirect discharge to prior investigation followed by prohibition or authorisation, which is granted for a limited period and is subject to review at least every four years. Discharges, disposal or tipping of List II substances are subject to an investigation and authorisation

⁶⁴ See *ibid.*, pp.194-6.

⁶⁵ See *infra*, Chapter 5, p.235.

⁶⁶ Fresh water instruments also include Council Directive 75/440 concerning the quality requirements of surface waters intended for the abstraction of drinking water; Council Directive 78/659 on the quality of fresh waters supporting fish life; Council Directive 80/778 relating to the quality of water intended for human consumption; and Council Directive 91/676 concerning the protection of waters against pollution caused by nitrates from agricultural sources.

procedure according to criteria laid down in the Directive. There have notably been several ECJ holdings whereby Member states have been found in violation of these provisions.⁶⁷

This piece-meal approach to water pollution - which has not actually succeeded in substantially improving the quality of Community waters despite extensive and long-standing regulation - has provoked a serious debate within the Community on whether there should be a framework instrument that would lay down general criteria for what is called 'the ecological quality' of all kinds of water leaving it to Member States to translate the overall objectives into quantified 'operational targets' for specific locations and circumstances in their territory, according to the principle of subsidiarity. The Commission has even produced a relevant proposal, which is aiming at incorporating all requirements for management of water into a single system premised on a 'river basin' approach, co-ordinating all the different objectives for which water is protected and filling any gaps, co-ordinating all relevant measures, and increasing public participation that will hopefully lead to great enforceability of the new instrument.⁶⁸ However, this has not yet met with adequate support, as there are fears that the existing regime, although not entirely effective, could be further weakened in the event such an instrument is adopted.⁶⁹

Now, comparing Community rules on land-based pollution to those under the Barcelona Convention and Protocols is by no means a straightforward task. At first glance, some basic differences are obvious; for instance, the fact that Community rules are much more elaborate and detailed which arguably improves the chances of the rule being implemented in actual practice, although it deprives states of a degree of flexibility in designing their laws and policy. Moreover, EU rules cover a much wider range of activities.

But at that point the obvious differences end. If one tries to extrapolate the core rules that are set out in various instruments, i.e. what level of protection against specific substances they introduce, there can be no uniform inference. For example, rules relating to the quality of shellfish and of bathing waters deal with different parameters, the Community ones with far more than those dealt with in the MAP system; consequently, Community law is arguably more stringent. On the contrary, pollution of the sea from organophosphorus compounds is only dealt with indirectly at Community level through the groundwater Directive, and there is no elimination date as in the Mediterranean measures; one could argue, then, that the latter are more rigid. In the case of measures for cadmium, it is again difficult for a non-scientist to assess the level of protection granted by the two instruments: the MAP one sets an overall limit value, which seems to be often lower than the Community limit values that refer to different sectors of the cadmium industry, while

⁶⁷ See, e.g. Case C-360/87, *Commission v. Italy*, 1991 *E.C.R.*, p.1-791.

⁶⁸ See EC Commission, Proposal for a Council Directive establishing a framework for Community action in the field of water policy, COM(97) 49 final - 97/0067 (SYN), 1997 *O.J.* (C 184) 2; as amended in COM (1999) 271 final.

⁶⁹ See M.Pallemaerts, 'The Draft Ecological Water Quality Directive', 5(1) *R.E.C.I.E.L.*, 1996, pp.61-2; and S.Leubuscher, 'The Water Framework Directive', *ibid*, pp.62-4.

the opposite seems to be true in relation to mercury limit values.

Having said that, as most Directives allow Member States to apply more stringent measures, an agreement to that effect in the context of MAP does not present significant problems. Nonetheless, EU Member States tend to submit declarations at Meetings of the Parties of the Barcelona Convention, pursuant to which recommendations on different substances do not prejudice their obligation to respect relevant Directives.⁷⁰ Essential background work is carried out in this context by comparing EU standards with proposed criteria in the MAP framework and rules before the latter are formally adopted.⁷¹

Lastly, a striking feature of Community legislation worth noticing is its frequent allowance for exceptions. Much discussion is devoted within MAP on the particularities of different countries or groups of countries with different developmental needs and resources, and on whether to impose limit values or quality objectives,⁷² but when it comes to adopting common measures differentiations are not so apparent. On the contrary, in the European context states are permitted to deviate from uniform practices; under the cornerstone Directive 76/464, they are even permitted to impose quality objectives instead of limit values, which indicates that EU countries should not be treated as an absolutely uniform group with regard to pollution levels and relevant protection rules either.

2.1.2.5. Directive 91/271 on the Collection, Treatment and Discharge of urban and industrial waste into the sea.

Directive 91/271 addresses a major source of land-based pollution in the Mediterranean - and the whole of Europe for that matter - and is consequently of primary importance, especially in view of the fact that there is no comparable set of legal rules in the Barcelona framework.⁷³

This Directive instructs Member States to provide towns of more than 15,000 inhabitants with waste water collecting or equivalent systems according to standards set out in Annexes by 31 December 2000, and towns of between 2,000 and 15,000 by 31 December 2005. Waste water has to be subject to 'secondary treatment', i.e. to be biologically treated before discharge, while more stringent requirements are laid down for sensitive areas that are identified on the basis of prescribed criteria and reviewed at least every four years.

Extension of deadlines, due to strictly technical problems, as implementation of the Directive requires significant and expensive alterations in the existing installations, is permitted in exceptional cases. Allowance is also made for laxer standards in less sensitive areas, but discharges

⁷⁰ See e.g. UNEP, *op.cit.* n.40, p.17, par.105, for such a declaration in relation to mercury standards and to the quality of shellfish waters. In the same vein, when organosilicon compounds were removed from Annex II of the Dumping Protocol, the EU submitted a reservation, *ibid.* p.78.

⁷¹ *Ibid.* par.106.

⁷² See *supra*, p.63.

⁷³ Despite frequent reference to waste treatment in 'soft' instruments, such as the Genoa Declaration, see UNEP, Report of the Fourth Ordinary Meeting of the Contracting Parties to the Barcelona Convention and its Related Protocols, UNEP/IG.56/5, 30 September 1985, p.23, and, more recently, the 1997 Strategic Action Programme, see UNEP, *op.cit.* n.58, pp.7-9.

must still be subject to 'primary treatment' and comprehensive studies must indicate that they will not have any substantial adverse impact on the environment. Areas no longer identified as less sensitive must comply with the stricter standards within seven years.

Discharges resulting after the prescribed treatment have to satisfy certain standards with regard to biochemical oxygen demand (BOD) and chemical oxygen demand (COD), suspended solids, phosphorous and nitrogen. Discharge of industrial waste water must be subject to prior regulations and/or authorisations to satisfy specific requirements, while some biodegradable industrial discharges are regulated separately. At the same time, re-use of treated waste water and sludge is encouraged. The disposal of sludge to surface waters by dumping or other means was to be terminated by 31 December 1998. The Directive sets out additional requirements concerning the adverse effects of discharges from one state to the other, and standards for the design, construction and operation of treatment plants.

States were to have enacted the necessary legislation by June 1993, but the actual implementation of the standards set showed differing interpretations in various Member States. That led to an additional Community instrument being adopted, Directive 98/15, which clarifies certain prescriptions relating to permitted discharges from urban waste water treatment plants. Still, Greece and Italy have been condemned by the ECJ for not having transposed the Directive on time, while at the end of 1998, cases of incorrect application against the two countries together with Spain were pending before the Court.⁷⁴

2.1.2.6. Directives on Industrial Processes Generating waste.

Industrial processes generating waste are more extensively treated in a series of instruments, the most significant of which, for present purposes, are:⁷⁵

- Council Directive 78/76 on the disposal of titanium dioxide waste -⁷⁶ responsible for the so-called 'red sludge' in the Mediterranean. Initially, discharge or dumping of such waste was subject to prior authorisation if no alternative means of disposal were available and after scientific evaluation showed that there were no harmful effects to the marine environment and other legitimate uses of the sea. When the Directive was reviewed States undertook to draw up programmes for the eventual elimination of such waste. Time limits were repeatedly extended, though, due to 'serious techno-economic difficulties', and were last set at the end of 1994, when a definitive ban must have been effected.

⁷⁴ See *infra*, Chapter 5, p.235.

⁷⁵ See also the general Council Directive 75/442 on waste, as amended by Directive 91/156; and the Council Directive 78/319 on toxic and dangerous waste, repealed by Council Directive 91/689 on hazardous waste.

⁷⁶ As supplemented by Council Directive 82/883 on procedures for the surveillance and monitoring of environments affected by waste from the titanium dioxide industry; and amended by Council Directive 83/29; and Council Directives 89/428, and 92/112 on procedures for harmonising the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry.

- Council Directive 75/439 on disposal of waste oils.⁷⁷ There is a prohibition of any discharge into surface, ground and coastal waters and drainage systems. Undertakings disposing of waste oil are to obtain permits and to be supervised by national authorities; re-use is especially encouraged. Again, application of this Directive has been fraught with problems.⁷⁸

Hence, a discernable pattern appears, namely that States find compliance with environmental regulation of vital industrial or other economic activities both difficult and undesirable, a point even better illustrated in the application of environmental impact assessment.⁷⁹

2.1.3. Duty to Control/Ban Dumping at Sea.

2.1.3.1. LOSC (Art.210) and London Convention.

As far as dumping is concerned, the LOSC imposes much more concrete obligations compared with land-based pollution, namely that states shall adopt legislation and other measures to prevent, reduce and control pollution from dumping at sea, that will be "no less effective" than relevant global rules and standards (Art.210(1), (2), and (6)); that any dumping activities under the jurisdiction of Parties shall not be carried out without permission from their competent authorities (Art.210(3)); and shall be subject to express prior approval of the relevant coastal state, if they are to be carried out within maritime areas under its jurisdiction, and after other states likely to be adversely affected thereby have been consulted (Art.210(5)). It follows that in areas under coastal jurisdiction dumping can be completely banned.

The relevant international rules and standards are found in the 1972 London Convention.⁸⁰ The substantive norms in the initial text of the Convention are almost identical with the Mediterranean Dumping Protocol - before revision - discussed below. Furthermore, the Consultative Meeting of the Parties assigned with the task of continuous review of its implementation has substantially developed the law on dumping, by terminating incineration at sea,⁸¹ and, most importantly, by adopting a moratorium on dumping of radioactive waste in 1983 which was turned into a definitive ban ten years later,⁸² and by unanimously agreeing that the dumping of all industrial waste should be terminated by the end of 1995.⁸³

⁷⁷ As amended by Council Directive 87/101.

⁷⁸ See P.W. Birnie, 'The European Community's Environmental Policy', in E.D.Brown & R.R.Churchill (eds.), *The UN Convention on the Law of the Sea: Impact and Implementation*, 1987, pp.544-5.

⁷⁹ See *infra*, Chapter 8, pp.335-42.

⁸⁰ It should also be noted that African states have undertaken to prohibit dumping and incineration of hazardous waste in all sea areas and penalise relevant activities in a separate regional instrument, i.e. the 1991 Bamako Convention (Art.4(2)(a)), see *infra*, p.82.

⁸¹ Resolution LDC.35(11).

⁸² At the Sixteenth Consultative Meeting of November 1993.

⁸³ Resolution LDC.43(13).

Then, in late 1996, the Convention was extensively reviewed by means of a Protocol,⁸⁴ whereby the precautionary, and the polluter pays principles are reaffirmed; the scope of application is extended to cover decommissioning of offshore installations; and more importantly, dumping is generally prohibited, except for substances included in a 'reverse' or 'positive' list. The difficulty many states faced with regard to the implementation of the London Convention before revision has led to the inclusion of the possibility of invoking a 'grace' period of five years after entry into force for full application of the Protocol; hence, it should not be expected that the new international standards will become operational soon.

2.1.3.2. Barcelona Convention (Art.5) and Dumping Protocol.

Under Article 5 of the Barcelona Convention, the Parties have to "take all appropriate measures to prevent, abate and *to the fullest possible extent eliminate* pollution by dumping, or *incineration at sea*." The Dumping Protocol further stipulated that the dumping of 'black list' substances is prohibited (Art.4); that of 'grey list' substances requires a prior special permit (Art.5); whereas that of all other matter requires a prior general permit (Art.6). When the revised Protocol enters into force, however, the general rule will become one of general prohibition of dumping of wastes, except of those enumerated in an exhaustive 'reverse' list, the dumping of which will require a prior special permit (Arts.4 and 5). This list comprises dredged material;⁸⁵ fish waste or organic material resulting from fish processing; vessels, until 31 December 2000; platforms and other structures provided that polluting material has been removed to the maximum extent; and inert uncontaminated and non-polluting geological material. Incineration at sea is also totally banned (Art.7).

However, the above prohibitions and restrictions will not apply when, because of *force majeure*, human life or the safety of a ship or aircraft is endangered. Such instances have to be immediately reported to the Secretariat and any Party likely to be affected, together with relevant information (Art.8). Moreover, Article 9 seems to provide a loophole for states considering that an exceptional and critical situation makes dumping of matter at sea, that is otherwise impermissible, necessary. In such an instance, the party involved has to inform the Secretariat - apparently before the activity is carried out -, which will in turn consult the other Parties, and recommend the best methods of storage or destruction (Art.9). The Party concerned is not bound by any relevant recommendation; it has, however, to communicate the "steps adopted in pursuance" thereof, and

⁸⁴ See R.Coenen, 'Dumping of Wastes at Sea: Adoption of the 1996 Protocol to the London Convention 1972', 6(1) *R.E.C.I.E.L.*, 1997, pp.54-61.

⁸⁵ Recommendations for the management of dredged material have been prepared by the Secretariat in close cooperation with government-designated experts, see UNEP, Report of the Eleventh Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, UNEP(OCA)/MED IG.12/9, 6 December 1999, Annex IV, Appendix VI.

the other Parties undertake to assist it to that effect.⁸⁶

That said, under both versions, the Parties have to designate national authorities competent to issue special permits (Art.10(1)), “after careful consideration” of certain factors, related to the characteristics and composition of the matter to be dumped, those of the dumping site and method of disposal, and other circumstances, laid down in the Annex (Art.6(1)). These authorities are responsible in respect of waste loaded in their territory, or loaded by a ship or aircraft registered in their territory or flying their flag when the loading occurs in the territory of a state not party to the Protocol (Art.10(2)).

Moreover, each state has to apply the measures required to implement the Protocol to all ships and aircraft registered in its territory or flying its flag - government ships are no longer exempted -, ships and aircraft loading in its territory matter to be dumped, and ships and aircraft believed to be engaged in dumping in areas under its jurisdiction (Art.11).⁸⁷ This is not the same as the obligation of article 10(2); it is more general as it does not involve only permit issue, but also other control duties, such as those stipulated in Article 12, i.e. the undertaking to issue instructions to the national maritime-inspection ships and aircraft and to other appropriate services to report to the national authorities any incidents or conditions wherever in the Mediterranean which give rise to suspicions that illegal dumping has occurred or is about to occur.

Despite detailed regulation, it seems that dumping is not a major pollution source in the Mediterranean; in 1985, for instance, only two Parties reported that they had granted permits for dumping during the previous years.⁸⁸ Still, in the same year, not all of the Parties had designated ‘competent authorities’ under Art.10.⁸⁹

2.1.4. Duty to Control Pollution from Offshore Activities - LOSC (Arts.208-209), Barcelona Convention (Art.7) and Offshore Protocol.

As was the case in relation to dumping, the LOSC instructs states to abide by internationally agreed rules to mitigate pollution from seabed activities and artificial islands, installations and structures subject to national jurisdiction (Art.208);⁹⁰ and from activities in the Area (Art.209), for which prescription of environmental rules falls under the mandate of the International Sea-Bed

⁸⁶ See also *infra*, Chapter 5, pp.188-9.

⁸⁷ Since Article 11 does not apply to non-parties, the 1976 Conference of Plenipotentiaries felt obliged to adopt Resolution 3, which stresses the importance of universal implementation and observation of Article 11 by all ships and aircraft and invites the Parties and IMO to persuade the other states to act in conformity with the Dumping Protocol. The fact remains, though, that third party ships would not be bound by regional law if they carried out dumping activities in the Mediterranean, but are arguably bound by customary law as reflected in the London Convention.

⁸⁸ see UNEP, *op.cit.* n.73, p.14.

⁸⁹ *Ibid*, p.35.

⁹⁰ The only set of rules developed in this context and in a non-binding form is found in UNEP’s Guidelines concerning the Environment related to Offshore Mining and Drilling within the Limits of National Jurisdiction of 1982. It must be noted, though, that MARPOL also applies to drilling rigs and other platforms (Art.2(4); Annex 1, Reg.21).

Authority (Art.145). Accordingly, rules, regulations, procedures and other measures to control these sources must be “no less effective” than international ones (Arts.208(3), 209(2)).

In the Mediterranean region, the Barcelona Convention requires states to “take all appropriate measures” to prevent, abate and *to the fullest possible extent eliminate* pollution resulting from the exploration and exploitation of the continental shelf and the sea-bed and its subsoil (Art.7). The Offshore Protocol, which is the instrument laying down the respective regime in detail, underwent a drafting procedure of several years and was adopted in October 1994.

This Protocol aims at ensuring that offshore activities do not cause pollution, and that “the best available techniques, environmentally effective and economically appropriate”, are used (Art.3), and creates a system of prior written authorisation by competent national authorities for any exploration or exploitation activity to be undertaken (Arts.4(1) and 28). In particular, authorisation of installations and activities is subject to submission, among others, of an environmental impact assessment, which should include elements specified in Annex IV (Art.5(1)(a)), provided that the national authority is satisfied that the installation is to be constructed according to international standards and practice; that the operator has the technical competence and financial capacity (Art.4(1)); and that there are no indications that the activities are likely to cause significant adverse effect on the environment (Art.4(2), 6(1)). Each authorisation may impose special conditions for the protection of the marine environment (Art.6(3)), to which sanctions are attached (Art.7).

A general obligation is imposed upon operators to use the best available, environmentally effective, and economically appropriate technology and to observe internationally accepted standards, with a view to avoid pollution caused by wastes and harmful or noxious substances (Art.8). Disposal of such substances is subject to the issuance of a prior permit by the national authority, according to a ‘black’ and ‘grey’ list classification (Annexes I and II), and after consideration of all factors set out in Annex III (Art.9). Disposal of oil and oily mixtures and drilling fluids is subject to the formulation of common standards to be adopted in accordance with Annex V, or stricter national ones (Art.10). Discharge of sewage is prohibited, except in certain cases, such as after treatment, but the Parties may impose stricter conditions (Art.11). Disposal of plastic and non-biodegradable garbage is also proscribed (Art.12).

In addition, operators have to make effective use of onshore reception facilities, or otherwise face sanctions (Art.13); take safety measures; have contingency plans; notify of any event causing or likely to cause pollution; and measure and report the effects of offshore activities on the marine environment (Arts.15, 16, 17, and 19). Finally, they are required to remove abandoned or disused installations taking into account international standards, and to remove or abandon or bury disused pipelines after cleaning them inside (Art.20(1), (2)); should an operator fail to comply with these requirements, the competent authority is empowered to undertake appropriate action at his expense (Art.20(6)).

2.1.5. Duty to Control Pollution from Maritime Activities.

2.1.5.1. LOSC (Art.211) and Barcelona Convention (Art.6).

Admittedly, the more far-reaching and detailed rules to be found in Part XII of the LOSC relate to pollution caused by operational discharges of vessels.⁹¹ This is arguably because there had already existed a well developed body of law on the jurisdiction of states to legislate and enforce for matters relating to ships and more generally to navigation,⁹² while at the same time the traditional supremacy - or even near exclusivity beyond territorial seas - of flag state jurisdiction was not sufficient to ensure protection of the marine environment.⁹³

Confining discussion for the moment to legislative jurisdiction,⁹⁴ one notices that the LOSC reduced coastal states' legislative competence as far as pollution regulations are concerned, but it increased the geographical area to which such regulations may be applied by instituting a new large area of jurisdiction for, among others environmental protection purposes, the EEZ (Art.56(1)(b)(iii)).⁹⁵ More specifically, ships in innocent passage have to comply with coastal laws and regulations with regard to marine pollution, even when they impose stricter standards than generally accepted international law, as long as innocent passage is not hampered (Arts.21(1)(f) and (4), 211(4)). Nevertheless, coastal laws cannot be stricter, if they refer to construction, design, manning and equipment of the ship (Art.21(2)).⁹⁶ Furthermore, coastal states are explicitly authorised to designate sea lanes and/or prescribe traffic separation schemes in the territorial sea taking into account recommendations of competent international organisations and local characteristics, and to require foreign ships to use them (Arts.22 and 211(1)). However, these are not mandatory nor are ships not complying with them sanctioned; only tankers, nuclear ships or ships carrying "inherently dangerous or noxious substances or materials" may be required to confine their passage to such sea lanes (Art.22(2)).⁹⁷

Vessels in transit passage are subject to coastal laws giving effect to applicable international regulations, i.e. regulations binding on the coastal state (Art.42(1)(b) and (4)), and have to respect sea lanes and traffic separation schemes conforming with generally accepted international regulations (Art.41); in addition, they are under an independent duty to comply with generally

⁹¹ It should nevertheless be noted that the whole of Part XII does not apply to warships and other governmental ships, see Art.236.

⁹² See, e.g., R.R. Churchill & A.V.Lowe, *The Law of the Sea*, (2nd ed.) 1988, Chapters 3, 4, 5, 11, and 13.

⁹³ See generally R.M'Gonigle & M.W.Zacher, *Pollution, Politics and International Law - Tankers at Sea*, 1979, Ch.4.

⁹⁴ On enforcement jurisdiction under the LOSC, see *infra*, Chapter 7, pp.296-7.

⁹⁵ It should be reminded here that Mediterranean states have not proclaimed EEZ, nor are they likely to undertake such action in the near future, see *supra*, Chapter 1, p.35.

⁹⁶ Cf. Art.17 of the 1958 Convention on the Territorial Sea.

⁹⁷ See G.Plant, 'Legal Environmental Restraints upon Navigation Post Braer', 10(9/10) *Oil & Gas L. & Taxation Rev.*, 1992, pp.247-50. There are also significant pressures from several countries for mandatory traffic measures and even mandatory ship reporting being considered by IMO, *ibid*, pp.250-58.

accepted international anti-pollution rules (Art.39(2)(b)).⁹⁸

Similarly, coastal laws applying to the EEZ may only give effect to generally accepted international rules and standards for enforcement purposes (Art.211(5)),⁹⁹ i.e. the state imports international law so that it can enforce it. That is unless a special area, such as those established under MARPOL, is designated with IMO approval as requiring enhanced protection, due to its oceanographical and ecological conditions, as well as its utilisation or the protection of its resources and the particular character of its traffic (Art.211(6)), in which case coastal laws can be more stringent so far as they are confined to discharge or navigation practices and not design, construction, manning and equipment standards. A similar but distinct concept that is gathering impetus at IMO is that of 'Particularly Sensitive Sea Areas' (PSSAs),¹⁰⁰ where it is envisaged that measures otherwise prohibited by international law, e.g. excessively restrictive to navigation, would be allowed.

The legislative competence of port states remained as it was under customary international law, in other words port states can adopt anti-pollution legislation as a condition of entry of foreign vessels in their ports.¹⁰¹ The new element introduced by LOSC is the encouragement it gives to co-operative arrangements between more than one port states establishing identical requirements, and the obligation imposed upon flag states to ensure that masters of ships flying their flag will, when navigating within the territorial sea of a state participating in such an arrangement and upon request of that state, furnish information as to whether they are proceeding to a state of the same region participating in such co-operative arrangements and, if so, to indicate whether they comply with the harmonised port entry requirements. As will be shown in Chapter 5, this notion of port state co-operation and reporting is particularly useful for more effective enforcement of international standards.¹⁰²

On the other hand, flag states have an obligation to adopt pollution regulations applicable to their vessels at least as strict as the generally accepted international rules and standards adopted through the competent international organisation or diplomatic conference (Art.211(2)). It is important that, in this way, LOSC makes these global standards obligatory for all flag states irrespective of their status with regard to a particular instrument, thus addressing the problem of sub-

⁹⁸ Churchill & Lowe, *op.cit.* n.92, p.92 are commenting that the advantage of implementing safety and pollution standards in coastal state's legislation is that they then become directly enforceable by the coastal state authorities, whereas the duty of compliance would allow only an international claim through diplomatic channels for breach of treaty obligations and the international conventions leave enforcement in the hands of the flag state; Plant, *op.cit.* n.97, p.250 says that article 39 is broadly drafted but precisely what are the consequences when ships fail to comply is unclear as LOSC remains silent on this point.

⁹⁹ Apart from the obvious prohibition of setting stricter standards, this proviso has been argued to imply that the coastal state is equally not able to apply lower standards in its EEZ, see Boyle, *op.cit.* n.7, p.361.

¹⁰⁰ Introduced under Resolution A.720(17). For a discussion of relevant Guidelines produced by IMO's Maritime Environment Protection Committee see Plant, *op.cit.* n.97, pp.252-5.

¹⁰¹ See Churchill & Lowe, *op.cit.* n.92, p.95.

¹⁰² See *infra*, Chapter 5, pp.212-7.

standard vessels widely considered as environmental hazards and usually - but not exclusively - flocked under 'flags of convenience' which are generally lax in relevant requirements.

'Generally accepted international rules and standards' include at least those among the IMO conventions and regulations that are widely ratified and generally observed even by non-parties.¹⁰³ The LOSC places special emphasis on their development and regular review, within the framework of IMO or at *ad hoc* conferences, as well as on the adoption and review of routing systems to minimise the threat of accidents and ensuing damage.

In this context, Article 6 of the Barcelona Convention reiterates the duty of the Parties to take measures "in conformity with international law to prevent, abate, combat and *to the fullest possible extent eliminate*" pollution caused by discharges of ships, as well as for the effective implementation of relevant internationally recognised rules and standards. Repeated reference to international law and standards in this Article points to the fact that, as far as operational pollution from ships is concerned, the Parties did not intend to adopt a special protocol. The main consideration rendering a regional - presumably stricter than the global - regime undesirable is the nature itself of international shipping, which makes the imposition of multiple standards along the route of a vessel burdensome and ultimately unworkable. More importantly, the nature of the maritime activity in the Mediterranean, i.e. its use by vessels of many flags in transit,¹⁰⁴ would render a regional regime applicable only to ships flying the flags of parties largely ineffective.¹⁰⁵ It follows that all global rules regarding marine pollution from maritime activity reviewed above applies in this area. Nevertheless, the special sensitivity of the Mediterranean, as a semi-enclosed sea, was put forward in IMO deliberations, resulting in its inclusion in the areas where discharges are totally prohibited under Annex I (Regulation I.10) of MARPOL which is examined in the following Section.

2.1.5.2. MARPOL.

The frequently invoked 'generally agreed international rules and standards' are laid down in the 1973/1978 MARPOL which superseded the 1954 OILPOL.¹⁰⁶ OILPOL's approach was

¹⁰³ For a discussion of what is meant by these terms, see Boyle, *op.cit.* n.7, pp.355-7; Kwiatkowska, *op.cit.* n.11, pp.172-3; and G.Kasoulides, *Port State Control and Jurisdiction: Evolution of Port State Regime*, 1993, pp.35-41.

¹⁰⁴ Approximately 1/6 of the world maritime traffic transits the Mediterranean, UNEP, *op.cit.* n.54, Annex IV, p.3.

¹⁰⁵ Cf. L.M.Alexander, 'Regionalism and the Law of the Sea: The Case of Semi-Enclosed Seas', 2(2) *O.D.I.L.J.*, 1974, p.159, where the author anticipated even two sets of standards, one for vessels of third countries and a less rigid one for coastal states of the region. Cf. 1992 Helsinki Convention, Annex IV, which designates specific discharge and inspection rules and standards for ships navigating in the Baltic Sea.

¹⁰⁶ It must also be noted that a series of other international conventions adopted under the auspices of IMO and ILO and not addressing pollution issues are viewed as complementary to MARPOL, because they aim at ensuring safety of navigation through high construction, equipment, manning and operation standards, and thus reduce the risks of incidents with possible adverse environmental impact. The main among them are: the 1972 COLREG, the 1974 SOLAS, the 1966 International Convention on Load Lines, the 1978 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers and the 1976 Convention Concerning Minimum Standards for Merchant Ships. These, together with MARPOL, are usually treated as a package of applicable standards, especially when it comes to enforcement.

primarily one of discharge regulation, and required states to ensure that reception facilities for vessels other than tankers are available at ports. MARPOL, on the other hand, imposed a general obligation to prevent vessel pollution from various harmful substances - i.e. noxious liquid substances in bulk (Annex II), harmful substances in packaged form (Annex III), sewage (Annex IV), and garbage (Annex V) - and not just oil, the discharge of which in small quantities - with the same limits as OILPOL - is permitted if it takes place en route and more than fifty miles from land (Annex I, Reg.9), but not within special areas where it is totally prohibited (Annex I, Reg.10); the Mediterranean is such an area since 1978. Reception facilities are also to be put in place by port states, with priority to be given to the special areas.

MARPOL sets out standards of vessel design and construction, notably oily water separators and monitoring devices for ships other than tankers, and segregated ballast tanks and crude oil washing systems for tankers.¹⁰⁷ In this connection, flag states have to provide their ships with an International Oil Pollution Prevention Certificate, pursuant periodic surveys with a view to ensure that the structure, equipment, fittings, arrangements and material of the ship fully comply with the Convention (Art.5(1), Annex I, Regs.5-8); equally important in this context is the compulsory oil discharge monitoring and control system for the purpose of continuously recording oil discharges (Annex I, Reg.16).

The most significant construction standards are to be found in the 1992 amendments which introduce further restrictions on the permissible amounts of oil discharges: new tankers (of 5,000dwt and above) must be fitted with double hulls or an equivalent alternative affording the same level of protection in the event of collision or stranding (Annex I, Reg.13F), while existing tankers must be converted accordingly, when they reach the age of 25 or 30 depending on whether they comply with the 1978 Protocol or not (Annex I, Reg.13G).¹⁰⁸

Moreover, under Annex II residues containing noxious liquid substances must be disposed at reception facilities; they may be discharged at sea according with specific rules, only if adequately diluted. Requirements for minimising accidental pollution are also laid down. Annex III prescribes standards on the packaging, marking, labelling, documentation, stowage and quantity limitations for harmful substances in packaged form. Annex IV bans the discharge of sewage in an area less than four miles offshore, unless it is treated in an approved plant on board, while in an area between four and twelve miles, sewage has to be comminuted and disinfected before discharge. Lastly, Annex V prohibits the disposal of all plastic at sea and defines minimum distances from land for the disposal of other kinds of garbage.

¹⁰⁷ For an extensive discussion of how the shift from discharge regulation to construction and equipment standards positively affected compliance with the conventions by all actors concerned, see R.B.Mitchell, *Intentional Oil Pollution at Sea: Environmental Policy and Treaty Compliance*, 1994.

¹⁰⁸ Because of the high cost of conversion, it is expected that many old ships will be scrapped and replaced by new, presumably safer ones, see 'How MARPOL has Changed', 2 *IMO News*, 1992, p.9.

Finally, it should be stressed that, according to Article 5(4), ships of non-parties don't escape conventional obligations, since the Parties have to ensure that no more favourable treatment is given to such ships. Thus, although the flag state is under no direct commitment, all ships can expect some kind of enforcement action if they don't meet MARPOL standards, at least when they enter a Party's port, where they are subject, under general international law, to any rule that the port state sees fit to prescribe.

The impact of MARPOL is considerable but by no means straightforward. By shifting the focus from regulating the amount of permissible discharges to technical construction and equipment standards, it became more 'enforceable'. In this regard it improved OILPOL, but it still relies heavily on flag states for effective implementation.¹⁰⁹

2.1.6. Duty to Control/Ban Maritime Transport of Hazardous Wastes.

2.1.6.1. LOSC (Art.23), Basel Convention and Bamako Convention.

Seaborne movement of hazardous matter presents a twofold threat of damage to the marine environment: In case of a casualty involving the carrier vessel and spilling or otherwise dispersing the cargo in the sea, and in case hazardous substances are transported to a state that cannot or may not dispose of them in a sound manner, with resulting contamination of the marine environment either directly or indirectly through aquifers. This kind of activity was very little regulated, even when it occurred in the vicinity of a coast, until the adoption, following UNEP's Cairo Guidelines and Principles for the Environmentally Sound Management of Hazardous Waste, of the 1989 Basel and the 1991 Bamako Conventions. Accordingly, the LOSC merely required ships in innocent passage carrying such matter to 'carry documents and observe special precautionary measures established for such ships by international agreements' (Art.23), and confine their passage to designated sea lanes as explained above.¹¹⁰

Having said that, innocent passage for ships carrying hazardous cargoes in its traditional sense has been repeatedly challenged. Egypt, for instance, upon ratification of the LOSC, declared that it would require foreign nuclear-powered ships and ships carrying nuclear or other inherently dangerous and noxious substances to obtain authorisation before entering its territorial sea, until the international agreements mentioned in Article 23, e.g. the Basel Convention, are concluded and Egypt becomes a party to them;¹¹¹ the same stance was taken by other states as well, but met with

¹⁰⁹ See W.Cheng-Pang, 'A Review of the Enforcement Regime for Vessel-Source Oil Pollution Control', 16(4) *O.D.I.L.*, 1986, p.318-20.

¹¹⁰ However, there is some state practice that deflects from that position, notably the 1985 Italian ban on the passage of tankers and ships carrying hazardous and noxious substances (over 50,000 tons) through the Strait of Messina, and more recent bans on innocent passage in areas adjacent to Italian islands, see Plant, *op.cit.* n.92, p.248.

¹¹¹ See *LoS Bulletin*, Special Issue, 1987, p.3.

firm resistance by major powers, such as the US and Russia.¹¹²

Now, the Basel Convention applies to 'hazardous' cargos, defined by the substances they contain, and other characteristics (Art.1(1), Annexes I-IV). At the same time a Party can impose stricter national criteria for the designation of such cargos (Art.1(1)(b)). A hazardous cargo may be transported by sea, unless it is exported to or from a non-party country; or to a country that has not consented to that effect; or pass in transit through a state that has not consented to the movement; or it is to be disposed in the area south of 60° South. In such cases movement is prohibited.

African states, particularly concerned with illegal trade of hazardous waste ending up in Africa and dissatisfied with the Basel Convention's failure to introduce a total ban on trade of such waste,¹¹³ concluded the 1991 Bamako Convention which completely prohibits the import of hazardous wastes, including radioactive material, in the continent, even for recycling purposes; while intra-African movement of waste, i.e. from one Party to another, is still allowed (Arts.4(1) and (3), 11(2)). Moreover, the definition of hazardous waste and in general the categories of wastes to be regulated are broader than in the Basel Convention (Art.2). In this context, although the Convention is not yet in force, all North African states, except Morocco, have banned waste imports.¹¹⁴

Importantly, the Basel Convention allows for more stringent arrangements to be adopted in bilateral, regional, and economic-political integration unit agreements (Art.11), such as the one now existing in Africa. In the same vein, waste may not be exported to Parties that have prohibited such imports or where the waste cannot be managed in an environmentally sound manner (Art.4(e)). Consequently, the Bamako Convention is complementary to and explicitly authorised by the global instrument.¹¹⁵ A significant development, namely Decision IV/9 of the 1998 Basel Conference of the Parties to prohibit immediately all transboundary movement of the most hazardous categories of wastes (List A), for whatever purpose, from OECD (Northern Mediterranean) to non-OECD countries,¹¹⁶ may even be said to have made the African instrument reluctant at least to the extent its provisions are now covered by the Basel regime.

When transport is still allowed, however, certain conditions must be met, including

¹¹² See L.Pineschi, 'The Transit of Ships Carrying Hazardous Wastes through Foreign Coastal Zones', in F.Francioni & T.Scovazzi (eds.), *International Responsibility for Environmental Harm*, 1991, pp.312-3.

¹¹³ See K.Kummer, 'The International Regulation of Transboundary Traffic in Hazardous Wastes: The 1989 Basel Convention', 41 *I.C.L.Q.*, 1992, pp.535-8; and C.R.H.Shearer, 'Comparative Analysis of the Basel and Bamako Conventions on Hazardous Waste', 23 *Env'l L.*, 1993, pp.144-53.

¹¹⁴ See B.Kwiatkowska, 'Ocean Affairs and the Law of the Sea in Africa - Towards the 21st Century', 17(1) *Mar.Pol.*, 1993, p.19.

¹¹⁵ See Shearer, *op.cit.* n.113, pp.174-83.

¹¹⁶ See 'New System for Waste Exports', 28(2) *Env'l Pol. & L.*, 1998, pp.68-9. In fact, it was Decision II/12 that initially laid down such standards, see 24(5) *Env'l Pol. & L.*, 1994, p.290. This was in 1995 turned into a formal amendment (Decision III/1), in view of extensive controversy on the binding effect of Conference of Parties' Decisions, see J.Werksman, 'The Basel Convention's Amendment to Ban the Shipping of Hazardous Wastes', 5(1) *R.E.C.I.E.L.*, 1996, pp.69-70.

notification to the competent authorities of the states concerned containing detailed information (Basel, Art.6(1), Annex V A; Bamako, Art.6(1), Annex IV A)); affirmative response in writing from the states of import and transit (Basel, Art.6(2),(3),(4); Bamako, Art.6(2),(3),(4), (5));¹¹⁷ appropriate packaging, labelling, and transportation according to international standards (Basel, Art.4(7)(b); Bamako, Art.4(3)(m)(ii)); provision of a movement document that will be carried on board (Art.4(7)(c), Annex V B; Bamako, Art.4(3)(m)(iii), Annex IV B); and any other condition that the states concerned have laid down when giving their consent (Arts.4(9)(c),(11), and 6(7),(11)).

The waste is to be tracked until safely disposed of; hence, the exporter must be notified that the waste has reached its destination and that it has been disposed of. Otherwise the import state has to be notified and ensure that the party in charge of the waste provides the information required (Basel, Art.6(9); Bamako, Art.6(8)). In addition, exporters of hazardous waste, which though legally transported cannot be disposed of as provided in the contract, must re-import it unless other environmentally sound arrangements can be made (Basel, Art.8; Bamako, Art.8)).

More generally, both instruments demand enactment of national laws in implementation of the Conventions which may impose additional requirements in so far as they are consistent with the Conventions and international law (Basel, Art.4(4) and (11); Bamako, Arts.4(4)(a) and 3(1)); and designation of national focal points charged with compiling and disseminating all types of information to other parties and the Secretariat (Basel, Arts.2(7) and 5(1); Bamako, Arts.1(9) and 5(1)).

Finally, it should be noted that the approach adopted in both instruments is that of minimisation of generation and transboundary movement of hazardous waste, i.e. that low-waste or 'clean production' technologies should be jointly developed with a view to eliminating the generation of such waste and achieving more efficient and environmentally sound management methods (Basel, Arts.4(2)(a), 10(2)(c); Bamako, Art.4(3)(c), (f) and (g)), and that waste should be disposed of at source (Basel, Art.4(2)(b) and (d); Bamako, Art.4(3)(d)).

2.1.6.2. Barcelona Convention (Art.11) and Hazardous Wastes Protocol.

In the Mediterranean, the Hazardous Wastes Protocol incorporating the main provisions of the Basel and Bamako Conventions was the most recent instrument to be added to the MAP arsenal in 1996.¹¹⁸ The Protocol is guided by the principle that transfrontier movement of hazardous waste is the exception rather than the rule, so that the obligation to take all appropriate measures to "reduce to a minimum, and where possible eliminate, the generation of hazardous wastes" (Art.5(1)), immediately follows the primary undertaking to "prevent, abate and eliminate pollution"

¹¹⁷ The Basel Convention, unlike the Bamako, allows a general notification covering multiple shipments of the same kind of waste to the same destination and via the same ports of exit and entry and the same transit states (Art.6(6)); it also allows for a general or specific waiver of transit states' consent (Art.6(4)).

¹¹⁸ For a comparative analysis of the three instruments, see P.Cubel, "Transboundary Movements of Hazardous Wastes in International Law: The Special Case of the Mediterranean Area", 12(4) *Int'l J. of Mar. & Coastal L.*, 1997, pp.447-74.

caused by transboundary movements and disposal of such waste (Art.5(1)). Movement of hazardous substances in the Mediterranean is to be reduced, and if possible eliminated, and to this end the Parties may individually or collectively ban the import of hazardous waste (Art.5(3)).

Furthermore, the Protocol itself bans the export and transit of hazardous wastes to all countries in the region, except Members of the EU (Art.5(4)). When such wastes cannot be safely disposed of in a developing Mediterranean country, transboundary movement is allowed only when the state of import ensures that it has the necessary facilities and technical capacity for safe disposal, and gives its written consent, along with any possible transit states after proper notification from the country of origin has been received (Art.6); however, if only passage through the territorial sea of the state of transit is involved, then there is only a duty of notification and not of waiting for the express consent of that state (Art.6(4)).¹¹⁹ Moreover, there is an additional duty to re-import waste that cannot be moved or disposed of safely (Art.7); unlike the Basel Convention, no alternative arrangements are allowed.

Finally, the Parties are to co-operate in technological fields, especially with regard to implementation and development of methods for reducing and eliminating hazardous waste, through clean production methods (Art.8(1)). To this end, they have to submit annual reports on the hazardous waste they generate and transfer in order to enable the Secretariat to produce a hazardous waste audit (Art.8(2)). What is more, in implementation of the precautionary principle, the Parties have an independent obligation to "ensure that clean production methods are applied to production processes" (Art.8(3)).¹²⁰

2.1.6.3. Council Regulations and Directives.

Transfrontier shipment of hazardous waste in the Community is supervised and controlled pursuant to Council Directive 84/631. The holder of the waste has to notify the competent authorities of dispatch or transit states, providing information on the nature of the waste and precautions taken. Notification may be acknowledged plainly or with conditions that have to be met before the shipment may proceed. The Directive applies to movement of hazardous waste to a non-Community destination as well. It has been updated and adapted to the requirements of international instruments, and in particular the Basel Convention,¹²¹ by Council Regulation 259/93 on the supervision and control of shipments of waste within, into and out of the EU,¹²² while a Council Decision incorporating the above-mentioned Decision IV/9 of the Conference of the Parties of the

¹¹⁹ See T.Scovazzi, 'New Ideas as regards the Passage of Ships Carrying Hazardous Wastes: The 1996 Mediterranean Protocol', 7(3) *R.E.C.I.E.L.*, 1998, p.264-7.

¹²⁰ In this vein, in their 1997 Strategic Action Programme they agreed on a target of 20% reduction of hazardous wastes generated from industrial installations, over a period of 10 years, see UNEP, *op.cit.* n.56,p.29.

¹²¹ Another instrument which is applicable as it bans the direct or indirect export of hazardous waste from the EU to ACP countries is the 1990 Lomé IV, Art.39(1).

¹²² As amended by Council Regulation 120/97.

Basel Convention has been recently issued.¹²³

2.1.7. Emergency Co-operation.

2.1.7.1. LOSC (Arts.198-199), OPRC Convention and MARPOL.

As far as emergency situations are concerned, the LOSC restates the customary duties of notification and co-operation in case of imminent danger of pollution of the marine environment,¹²⁴ and even requires joint development of contingency plans for responding to pollution incidents (Arts.198-199); while the 1990 OPRC Convention provides the global framework for co-operation and assistance in oil pollution emergencies irrespective of the source, and should be viewed as complementary to the Mediterranean Emergency Protocol reviewed below.

Under the OPRC Convention, the Parties are committed to collaborate in mitigating oil spills and to provide assistance upon request. To this effect, they have to make sure that ships, offshore installations, aircraft, ports, and oil-handling facilities report without delay any incident involving a discharge actual or threatened to the nearest coastal state or responsible national authority. These reports are to be made following standards developed at IMO and especially those of MARPOL. In this respect, MARPOL and the OPRC Convention lay down international rules on prompt notification that under LOSC Article 211(7) should be adopted by flag, coastal and port states alike. When a state receives such a report, it has to assess the nature, extent and possible consequences of the incident and inform all states likely to be affected. Each Party must establish a national response system (OPRC, Art.6) and ensure that ships, offshore installations, aircraft, ports, and oil-handling facilities under its jurisdiction have an appropriate contingency plan (OPRC, Art.3). It should be noted in this connection that the OPRC Convention has inspired positive action long before its entry into force, as IMO relied on its substantive provisions in organising assistance to states in need.¹²⁵

More detailed rules are found at the 1991 amendments of MARPOL requiring vessels over a certain tonnage to carry an oil pollution emergency plan approved by the flag Administration, setting out the procedure to be followed in reporting an oil pollution incident; the authorities to be informed; the action to be taken; and the procedure and point of contact on the ship for coordinating action with national and local authorities. The national response system must contain at least such a plan and designated national authorities and operational focal points. Moreover, each Party must maintain, individually or in co-operation with other Parties and international organisations, and the oil and shipping industry, a minimum level of oil spill response equipment; programmes for its use;

¹²³ Namely Council Decision 99/816.

¹²⁴ See Birnie & Boyle, *op.cit.* n.9, pp.102-9.

¹²⁵ For example, in the Persian Gulf oil spill disaster and the Katina P incident off the coast of Mozambique, see W.A.O'Neil, 'The International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC)', in C.M.de la Rue (ed.), *Liability for Damage to the Marine Environment*, 1993, pp.24 and 27.

a programme of exercises and training of personnel; detailed plans and communication capabilities; and a coordinating mechanism. Finally technical and educational assistance and co-operation in technology transfer is provided for the Parties with lesser means.

2.1.7.2. Barcelona Convention (Art.9), Emergency Protocol and Offshore Protocol.

When it comes to pollution emergencies - the most obvious and frequent of which are accidents involving ships carrying dangerous substances, particularly oil, the Barcelona Convention Parties undertake - or rather reaffirm their customary duty - to co-operate in taking all necessary measures, whatever the causes of such emergencies and with a view to reduce or eliminate resulting damage (Art.9(1)), and notify the Secretariat or directly any Party likely to be affected, as soon as they become aware of any emergency (Art.9(2)).

These duties are restated in the Emergency Protocol - currently under revision -¹²⁶, where the 'necessary measures' are laid down in detail: They involve the maintenance and promotion of contingency plans,¹²⁷ and means for combatting pollution, such as equipment, ships, aircraft and manpower (Art.3), and the development and application of monitoring activities that would furnish precise information on emergency situations (Art.4). All Parties had to have national Contingency Plans established by 1989,¹²⁸ but by 1993 seven countries had failed to do so.¹²⁹ The first sub-regional contingency scheme is the Plan on response to accidental marine pollution in the RAMOGE region (RAMOGEPOL) drawn up in October 1993;¹³⁰ while in 1995 and 1996 respectively, relevant schemes were introduced for the maritime areas of Cyprus, Egypt and Israel, and for the Southwestern Mediterranean (Morocco, Algeria, Tunisia).¹³¹

Moreover, pursuant to the Emergency Protocol, states have to instruct the masters of ships flying their flag and pilots of aircraft registered in their territory to report all accidents causing or likely to cause pollution and the presence, characteristics and extent of spillages of oil and other harmful substances observed at sea likely to present a serious and imminent threat (Art.8(1), "by the most rapid and adequate channels in the circumstances", either to a Party or to the Regional Emergency Response Centre for the Mediterranean Sea (REMPEC),¹³² and which in turn informs

¹²⁶ See UNEP, *op.cit.* n.56, Annex IV, Appendix II.

¹²⁷ Cf. 1983 Quito Supplementary Emergency Protocol, Art.II, where, unlike the Mediterranean Protocol, it sets out minimum requirements that national contingency plans have to meet.

¹²⁸ See UNEP, *op.cit.* n.40, p.32.

¹²⁹ See UNEP, *op.cit.* n.48, p.7.

¹³⁰ *Ibid*, p.28.

¹³¹ On international funding provided for the latter see *infra*, Chapter 6, pp.284-7.

¹³² REMPEC has several responsibilities, mainly collection and dissemination of information on competent national authorities responsible for receiving reports of marine pollution and for dealing with matters concerning measures of assistance between Parties; establishment of a data base on chemicals, their properties and risks, response techniques and combatting methods progressive development and operation of a marine pollution emergency decision support system, with a view to rapidly providing coastal states with information concerning behaviour, risks and different (continued...)

other Parties likely to be affected (Art.8(2)). According to Annex I of the Protocol, these reports have to contain, the identification of the source of pollution, the geographical position, time and date of the occurrence, the wind and sea conditions prevailing, information on the responsible ship and if possible a description and estimation of the harmful substance (Annex I, Arts.1-2).¹³³

States must, furthermore, co-ordinate the utilisation of the means of communication at their disposal in order to ensure, with the necessary speed and reliability, the reception, transmission and dissemination of all reports and urgent information relative to emergencies (Art.7).

Any Party faced with an emergency situation must make the necessary assessments of its nature and extent, of the quantity, direction and speed of the spillage; take every practicable measure to avoid or reduce the effects of pollution; immediately inform all other Parties, either directly or through the REMPEC, of the assessments and of any action taken or intended; and continue to observe the situation for as long as possible and report thereon (Art.9(1)). It may also call for assistance from other Parties, either directly or through REMPEC, starting with those likely to be affected by the pollution. This assistance may comprise expert advice and the supply to or placing at the disposal of the Party concerned of products, equipment and nautical facilities. Of course, this assistance is not guaranteed; Parties "shall use their best endeavours" to render it (Art.10(1)).

Lastly, the Emergency Protocol requires states to co-operate, as far as practicable, in the salvage and recovery of polluting substances in containers, packages etc so as to reduce the danger of pollution (Art.5); it is reasonable to assume that in discharge of this obligation they at least have to adapt their national salvage laws so as to include the marine environment among protected interests.¹³⁴

Further elaboration by the Meeting of the Parties resulted in various Recommendations on principles and guidelines concerning co-operation and mutual assistance, the role and responsibilities of experts sent on site, equipment sent in case of international assistance operation, procedures that could be applied in case of a joint operation, procedures to be followed and persons to be conducted in case of emergency etc.¹³⁵

The recent Offshore Protocol also contains special provisions, under the heading

¹³²(...continued)

possibilities for action in case of accident; development and maintenance of a regional Communications/Information system; development of technological co-operation and training programmes; assistance to requesting states in the preparation and development of bilateral or multilateral operational agreements; assistance to requesting states in cases of emergency, by using its own capacities or through the secondment of experts, or by obtaining assistance from other Parties or from outside the region. On the work of the Centre during recent years, see, e.g., REMPEC, Review of the Implementation of the Regional System Regarding International Assistance in Cases of Emergency, REMPEC/WG.5/Inf.22, Malta, 1992; and under the same title, REMPEC/WG.10/Inf.10, Malta, 1994.

¹³³ As was the case with dumping, Resolution 5 of the 1976 Conference of Plenipotentiaries urges third states to see that ships flying their flag observe the Protocol's reporting requirements and Parties to encourage charterers of their nationality to insert in charter parties a clause to the effect that the ships in question navigating in the Mediterranean shall observe the same provision as ships flying the flag of a Party.

¹³⁴ See also 1989 International Convention on Salvage, Articles 8 and 14.

¹³⁵ See UNEP, *op.cit.* n.46, Annex IV, pp.3-13.

“Safeguards”, with a view to preventing and dealing with harmful accidents. States under whose jurisdiction an offshore activity is carried out have to ensure - and to that effect carry out inspections - that safety measures are taken with regard to the design, construction, operation etc. of installations; that at all times the operator has *in situ* adequate equipment to prevent accidental pollution and promptly respond to an emergency (Art.15), in accordance with the latter’s contingency plan which is laid down under the procedures defined in the Emergency Protocol (Art.16).

The operator is additionally under the obligation to report to the competent authority any event on his installation causing or likely to cause pollution, and any such event observed at sea (Art.17). If a Party becomes aware of imminent danger or actual transfrontier pollution, it shall immediately notify the parties likely to be affected and provide them with timely information that would enable them to take appropriate measures (Art.26(3)). When an emergency arises, any Party in need of assistance may request help either directly from another state or through REMPEC, under the pertinent provisions of the Emergency Protocol (Art.18).

2.1.7.3. Community Instruments.

Council Decision 86/85 on the establishment of a Community information system for the control and reduction of pollution caused by oil spillages of hydrocarbons and other harmful substances discharged at sea or in inland waterways¹³⁶ establishes an information system that comprises a list of national and joint contingency plans; an inventory of resources for combatting marine pollution, i.e. equipment and personnel, existing in Member States; a catalogue of the means listed in the inventory, describing all the different types of clean-up facilities; an inventory of resources for intervention for combating other harmful substances spilled at sea; and of the resources for intervention against a spillage of hydrocarbons or other substances in major inland waters, especially certain international waterways; a compendium of hydrocarbon properties and their behaviour and of methods of treatment; a compilation study on the different impacts of hydrocarbons on fauna and flora, depending on the characteristics of the area concerned; and information on the properties and behaviour of other harmful substances. Member States have to provide, update and make use of that information. A Task Force of experts that can be called upon to provide advice and assistance in case of emergency complements the information system. This instrument is not confined to spillages caused by vessels, but of course such incidents are the most frequent ones.

More generally Directive 93/75 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods¹³⁷ provides for compulsory notification to the competent authorities of the port state of specific information concerning any ship

¹³⁶ Amended by Decision 88/346.

¹³⁷ As amended by Directive 98/55.

and its cargo, if the latter falls under the definition of 'dangerous or polluting' according to MARPOL or the pertinent IMO Codes, whenever that vessel enters or leaves a Community port. It also institutes an obligation under Community law to promptly report any incident involving such ships without prejudice to the afore-mentioned international arrangements.

2.2. The Hierarchy of International Marine Pollution Rules Applicable in the Mediterranean.

It is now useful to clarify the relationship between the great variety of international environmental norms that are applicable in the Mediterranean area. There follows a discussion, initially, of the relationship between the Barcelona Convention and other international environmental agreements, and, then, of the position of international treaties in Community law.

2.2.1. The Relationship of the Barcelona Convention and Related Protocols with Other International Environmental Agreements.

The Barcelona Convention itself sets out the basic hierarchical order to be followed in case of friction between different rules of international law: The general (customary) international law takes precedence (Art.3(1)); the 1982 LOSC follows, or even coincides with customary law to the extent that it codifies and/or progressively develops it (Art.3(3)); the Barcelona Convention comes next; and last come all other bilateral or multilateral agreements, regional or sub-regional inclusive, for the protection of the Mediterranean environment (Art.3(2)).¹³⁸ This subordination clause helps clarify difficult legal questions, often arising when several rules apply to the same issue, and had particular significance with regard to the LOSC, since, on one hand, the Barcelona Convention was *lex specialis*, while, on the other, the LOSC was *lex posterior*. The situation has, of course, now changed in view of the fact that the Barcelona Convention text has been formally amended in 1995; hence, when the latter effectively comes into force, it will be both the special and the most recent legal text addressing protection of the marine environment in the Mediterranean. Consequently, it may only be superseded by a rule of customary law whether included in the LOSC or not.

It should also be reminded in this connection that the LOSC, for its part, explicitly authorises regional elaboration of marine protection norms, and, more generally, regional institutional co-operation.¹³⁹ In Article 197, states express their commitment to:

¹³⁸ See B.Vucas, 'The Protection of the Mediterranean against Pollution', in U.Leanza (ed.), *The International Legal Regime of the Mediterranean Sea*, 1987, pp.419-20.

¹³⁹ In fact one of the major innovations in the modern law of the sea, namely the institution of the Exclusive Economic Zone, stemmed from a regional (African) claim widely endorsed during the LOSC negotiations, see Conclusions of the African States Regional Seminar on the Law of the Sea, Yaounde, 20-30 June 1972, reprinted in 12 *I.L.M.*, 1973, p.210.

“...co-operate on a global basis and, as appropriate, on a regional basis,¹⁴⁰ directly or through competent international organisations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with [the] Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features.”

They, moreover, have to endeavour to harmonise their policies by establishing, especially through competent international organisations and conferences at the global or regional level, such rules, standards and procedures, “taking into account characteristic regional features, the economic capacity of developing states and their need for economic development” (Art.207(3) and (4)). A prime example of such a ‘harmonisation’ respecting the relevant parameters is taking place in the context of the Athens Protocol discussed above.

In this vein, specific obligations assumed under agreements predating or implementing the LOSC are to be respected - in deviation from the general supremacy rule of Article 311, but should be carried out consistently with the general principles and objectives of the Convention (Art.237). The rationale behind this approach is the assumption that “marine pollution could be effectively dealt with by a combination of global, regional and national rules and standards with the global ones fixing the minimum provisions... and the regional ones laying down particular and stricter provisions”;¹⁴¹ this is why Part XII has been described as “an ‘umbrella’ for regional activity”, especially in view of the main trend in international regulation towards “increasing emphasis on regionalism as a functional compromise between a necessarily generalised global response and unpredictable and uncertain unilateral responses”.¹⁴²

Semi-enclosed seas, such as the Mediterranean, are - due to their particularities - inherently susceptible to regional regulation.¹⁴³ The LOSC recognises this reality and calls upon states bordering semi-enclosed seas to a closer co-operation with a view to co-ordinating their policies in relation to marine living resources, protection of the marine environment, and scientific research (Arts.122-123), although admittedly it does not go so far as to satisfy the initial aspiration of the countries that put forward the relevant proposals - developing Mediterranean states being prominent

¹⁴⁰ On the tensions between ‘regionalists’ and ‘internationalists’ during LOSC negotiations, see J.W.Kindt, ‘The Effect of Claims by Developing Countries on LOS International Marine Pollution Negotiations’, 20(2) *Virginia J. of Int’l L.*, 1980, pp.313-40.

¹⁴¹ UN, Official Records of the General Assembly: Twenty-Seventh Session, Suppl.21 (A/8721), p.53, cited in C.O.Okidi, ‘Toward Regional Arrangements for Regulation of Marine Pollution: An Appraisal of Options’, 4(1) *O.D.I.L.J.*, 1977, p.13. For a comparison of the unilateral, regional and global approach to marine pollution regulation and the substantive merits of the regional one, see *ibid*; and C.O.Okidi, *Regional Control of Ocean Pollution, Legal and Institutional Problems and Prospects*, 1978, Chapter III.

¹⁴² See M.L.McConnell & E.Gold, ‘The Modern Law of the Sea: Framework for the Protection and Preservation of the Marine Environment?’, 23 *Case West.Res.J.I.L.*, 1991, p.85.

¹⁴³ See L.M.Alexander, ‘Regionalism and the Law of the Sea: The Case of Semi-Enclosed Seas’, 2(2) *O.D.I.L.J.*, 1974, pp.151-186; and by the same author, ‘Regional Arrangements in the Oceans’, 71 *A.J.I.L.*, 1977, pp.84-109.

among them - by establishing a distinct legal category.¹⁴⁴

The clear implication of the above is that the Mediterranean legal system must follow general international law on the protection of the marine environment as it evolves; regional rules may only be more protective, never more permissive than the global ones.¹⁴⁵ The Preamble itself of the Barcelona Convention reinforces this inference; the Parties, explaining the need for a regional legal system, noted "... that existing international conventions on the subject do not cover, in spite of the progress achieved, all aspects and sources of marine pollution and do not entirely meet the special requirements of the Mediterranean Sea Area". It follows that, for matters not specially regulated in the Barcelona regime, most notably operational pollution from ships, the applicable law is found in other international regimes. Article 6, indeed, reiterates the customary duty of the Parties to take measures "in conformity with international law to prevent, abate, combat and to the fullest possible extent eliminate" pollution caused by discharges of ships, as well as to effectively implement relevant internationally recognised rules and standards, i.e. principally MARPOL and other IMO standards discussed above; in this way these standards become indirectly binding on the Barcelona Parties, even if the latter have not formally committed themselves in this respect.

As far as the Dumping Protocol is concerned, Article 13 states that this instrument should not be construed so as to prejudice the right of Parties to take other measures, in accordance with international law, to prevent pollution from dumping. Hence, complementary or stricter measures, established in other *fora*, are entirely legitimate. Having said that, over the years, it had been suggested that, because of a statement in the Preamble of the Protocol to the effect that Mediterranean states were concluding the agreement "bearing in mind" the 1972 London Convention, the latter should prevail, in case of incompatibility, for parties to both Conventions.¹⁴⁶ What seemed more significant, in view of the widely held opinion that the London Dumping Convention represents customary law in the field, was to establish that the global instrument did in fact set the minimum standards, obligatory for all, and only higher ones could be imposed through other non-global instruments. This is how revision of the Dumping Protocol came about, so that the regional law on dumping now incorporates, or even moves beyond,¹⁴⁷ global rules, and especially the decisions of the London Convention Parties to prohibit industrial dumping and incineration at sea.

In the same vein, the recent Hazardous Waste Protocol acknowledges in its Preamble both

¹⁴⁴ On the proposals at the LOSC negotiations, the underlying rationale of the proponents of the notion, and the fears and position of developed Mediterranean states and major naval powers, see M.Benchikh, 'La Mer Méditerranée, Mer Semi-Fermée', 84 *R.G.D.I.P.*, 1980, pp.284-297.

¹⁴⁵ See J.J.Ruiz, 'The Evolution of the Barcelona Convention and its Protocols for the Protection of the Mediterranean Sea against Pollution', in E.L.Miles & T.Treves (eds.), *The Law of the Sea: New Worlds, New Discoveries* (Law of the Sea Institute Twenty-Sixth Annual Conference Proceedings), 1993, p.210.

¹⁴⁶ See Vucas, *op.cit.* n.138, pp.422-3.

¹⁴⁷ See *supra*, pp.112-3

the Basel Convention, and Decisions adopted by the latter's three first Conferences of the Parties, as well as the Lomé IV and Bamako Conventions. On the other hand, the Emergency Protocol has not yet undergone any revision, and, although acknowledging the older MARPOL, 1969 Intervention Convention, and 1973 Intervention Protocol, fails to take into account the more recent OPRC Convention.

Lastly, as far as the Athens and the Offshore Protocols are concerned, the issue examined here does not present many difficulties, since global rules are almost non-existent. Hence, the revised Land-Based Protocol merely acknowledges in its Preamble the 1995 Global Programme of Action for the Protection of the Marine Environment from Land-Based Sources, while the Offshore Protocol does the same with regard to relevant provisions laid down in the LOSC.¹⁴⁸

2.2.2. The Relationship of Community Law with International Environmental Agreements.

2.2.2.1. Community Participation in International Environmental Agreements.

The Community has an international legal personality both under general international law which attributes such personality to international organisations,¹⁴⁹ and, albeit implicitly,¹⁵⁰ under the EC Treaty, which regulates the modalities for the conclusion of international agreements between the Community and third states or international organisations (Arts.133(3), 300, 310), and other aspects of Community relations with international organisations (Arts.302-304). Where the EC Treaty accords a certain power to the Community, Member States may not exercise the same power concurrently,¹⁵¹ and this equally holds for agreements to which the Community is not formally a party, while the Member States are, and which cover a subject-matter of exclusive Community competence. In those instances, the Community replaces Member States in the fulfilment of obligations under the relevant treaty.¹⁵²

In fact, the actual competence of the Community to enter into treaties is not confined to the instances explicitly provided for in the EC Treaty, but rather extends to the whole range of targets

¹⁴⁸ See *supra*, pp.61 and 76-7, respectively.

¹⁴⁹ Codification of the ensuing competence to enter into international agreements has been attempted through the 1986 Convention on the Law of Treaties between States and International Organizations.

¹⁵⁰ The EC Treaty does not explicitly provide for the international legal personality of the Community, notwithstanding Articles 281 *et seq.* confirming its legal personality in the domestic order of Member States; *cf.* Article 6 of the ECSC Treaty, which expressly vests the ECSC "in international relations...[with] the legal capacity it requires to perform its functions and attain its objectives". However, this is deemed to be an assertion of personality in international law as well, see D.McGoldrick, *International Relations Law of the European Union*, 1997, p.29. See also, *ibid.*, pp.36-9, for a discussion of the issue of why the EU has no legal personality as yet.

¹⁵¹ See Opinion 1/75, 1975 *E.C.R.*, p.1355.

¹⁵² Cases 21 to 24-72, *International Fruit Company*, 1972 *E.C.R.*, p.1219.

laid down therein. In the ERTA case,¹⁵³ the European Court of Justice (ECJ) found that what is now Article 281 ("The Community has legal personality") confers on the Community treaty-making power in its international relations, on any of the objectives set out by the EC Treaty, especially in Part One. If some form of common rule in pursuance of the objective has been issued, any concurrent exercise of such a power by Member States that might affect this rule or alter its scope is excluded. According to this theory of 'parallelism', competence *in foro externo* follows - and is analogous to -¹⁵⁴ that *in foro interno*. In the same vein, when Community law gives an organ competence to achieve a certain goal, the Community has the power to undertake international commitments necessary for that achievement, even in the absence of an explicit provision to that effect ('implied powers').¹⁵⁵

Having said that, international environmental agreements with Community participation are explicitly allowed under the EC Treaty (Art.174(4)),¹⁵⁶ but Article 176 implies that in the environmental plane there can only be minimum standards and not exclusive competence.¹⁵⁷ Consequently, Member States retain their own competence at the international level, but only consistently with the ERTA principles.¹⁵⁸ However, the terms of a particular convention and those of internal Community rules rarely coincide and it is difficult to establish where the exclusive competence of the Community ends regarding a specific subject-matter regulated by a convention, and where concurrent competence begins. The most commonly used method in such instances, especially in the environmental sphere, is that of 'mixed agreements', to which both the EU and some or all Member States are parties.¹⁵⁹ Hence, the Community is bound by an increasing number of multilateral conventions covering a broad spectrum of environmental issues, the most significant of which for present purposes are the Basel Convention; and most importantly, the Barcelona Convention and Protocols,¹⁶⁰ and it is also a signatory to the 1982 Convention on the Law of the Sea.¹⁶¹

¹⁵³ Case 22-70, Commission v. Council (ERTA), 1971 *E.C.R.*, p.263.

¹⁵⁴ See Cases 3, 4 and 6/76, Kr mer, 1976 *E.C.R.*, p.1279; and Opinions 1-75, *loc.cit.* n.151; 1-76, 1977 *E.C.R.*, p.741; 1-78, 1979 *E.C.R.*, p.2871; and 2/91, 1993 *E.C.R.*, p.1-1061. For an elucidating discussion of these cases, see T.C.Hartley, *The Foundations of European Community Law*, 4th ed.1998, pp.159-70.

¹⁵⁵ Cf. Reparation for Injuries Case, 1949 *I.C.J. Reports*, p.179.

¹⁵⁶ See generally J.H.Jans, *European Environmental Law*, 1995, Chapter II.

¹⁵⁷ See M.Hession & R.Macrory, 'Maastricht and the Environmental Policy of the Community: Legal Issues of a New Environment Policy', in D.O'Keefe & P.M.Twomey (eds.), *Legal Issues of the Maastricht Treaty*, 1994, pp.159-160.

¹⁵⁸ C.Zacker, 'Environmental Law of the European Economic Community: New Powers under the Single European Act', 14(2) *Boston Coll.Int'l & Comp.L.Rev.*, 1991, pp.270-1.

¹⁵⁹ See generally D.O'Keefe & G.Schermers (eds.), *Mixed Agreements*, 1983; McGoldrick, *op.cit.* n.150, Chapter 5; and M.Hession, 'The Role of the EC in Implementing International Environmental Law', in J.Cameron, J.Werksman & P.Roderick (eds.), *Improving Compliance with International Environmental Law*, 1996, pp.180-4.

¹⁶⁰ Council Decisions 77/585, 1977 *O.J.* (L 240) 1; 81/420, 1981 *O.J.* (L 162) 4; 83/101, 1983 *O.J.* (L 67) 1; 84/132, 1984 *O.J.* (L 68) 36.

¹⁶¹ Other environmental Conventions to which the Community is a Party are the 1973 Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), Council Regulation 3626/82, 1982 *O.J.* (L 384) 1, as (continued...)

The participation clause of the Barcelona Convention, whereby the EU - and other regional economic groupings exercise their right to vote with a number of votes equal to the number of their member states which are Parties to the Convention, while they may not exercise this right in case where the Member States exercise theirs, and conversely (Art.25), has served as a precedent for other multilateral instruments, although it took some time to find its place in subsequent treaties.¹⁶²

However, Community participation in the LOSC presented rather more complexities. The LOSC includes a clause (Art.305 (1)(j)) according to which "an international organisation may sign this Convention if a majority of its Member States are signatories of this Convention";¹⁶³ the EU did in fact meet the requirement and signed the Convention. In addition, it was required to make a declaration of competence stating the matters governed by LOSC in respect of which competence had been transferred by those Members that were also signatories, as well as the nature and extent of that competence (Annex IX, Art.2). That was provoked by many participants at the Law of the Sea Conference being reluctant to accept that an international organisation could substitute its members in carrying the obligations and rights deriving from the Convention in a general and all-encompassing way. In response, the Community bluntly declared that it had competence with regard to the conservation and management of sea fishing resources; in relation to other marine environmental matters, however, it declared its competence "as formulated in provisions adopted by the Community and as reflected by its participation in certain international agreements", selectively listed in an Annex.

This incident illustrates the fact that the 'mixed agreement' device does not solve all problems arising from the extent of Community competence at each instance; there have indeed been times when the EU has refrained from participating in decisions at Meetings of Contracting Parties,¹⁶⁴ or - even worse - has entered into disputes with Member States on their rights to adopt

¹⁶¹(...continued)

amended; the 1979 Convention on Conservation of European Wildlife and Natural Habitats, 1982 *O.J.* (L 38) 3; the UN Framework Convention on Climate Change, 1994 *O.J.* (L 33) 13; and the Convention on Biological Diversity, 1993 *O.J.* (L 309) 3.

¹⁶² See, e.g. the 1976 Bonn Agreement relating to the EU accession to the 1963 Berne Convention for the Protection of Rhine against Pollution, cited in M.Brusasco-MacKenzie & A.Kiss, 'Les Relations Exterieures des Communautés Européennes en Matière de Protection de l'Environnement', 35 *A.F.D.I.*, 1989, at fn.9; Article 15 of the 1985 Vienna Convention for the Protection of the Ozone Layer; and Art.20(2) of the 1992 Paris Convention for the Protection of the Marine Environment of the North East Atlantic.

¹⁶³ See, among others, P.W.Birnie, 'The European Community's Environmental Policy', in E.D.Brown & R.R.Churchill (eds.), *The UN Convention on the Law of the Sea: Impact and Implementation*, (Law of the Sea Institute Nineteenth Annual Conference Proceedings), 1987, pp.532-3; and G.Conetti, 'UNCLOS and EEC External Competence on Marine Environment Protection', in B.Vucas (ed.), *Essays on the New Law of the Sea*, 1985, pp.399-406.

¹⁶⁴ For example, in the 1990 Meeting of the Montreal Protocol Parties, it did not take part in the decision to establish a Fund to assist developing countries, see N.Haigh, 'The European Community and International Environmental Policy', in A.Hurrell & B.Kingsbury (eds.) *International Politics of the Environment*, 1992, pp.240-1. On the problems that EU participation in the Vienna Convention and the Montreal Protocol created, see J.Temple Lang, 'The Ozone Layer Convention: A New Solution to the Question of Community Participation in 'Mixed' International Agreements', 23 *C.M.L.Rev.*, 1986, pp.157-176.

more stringent standards than those under EU law.¹⁶⁵

As far as conclusion of international agreements by the Community is concerned, the Maastricht Treaty introduced substantial changes in the procedure laid down in what is now Article 300.¹⁶⁶ More specifically, the Commission is the negotiator, while in principle the Council 'concludes' the final agreement, i.e. expresses consent to be bound (Art.300(1)). When expressing its consent to be bound, the Council may delegate - with or without attaching conditions - some of its powers to the Commission, so that the latter may itself approve on behalf of the Community modifications of the agreement adopted by a simplified procedure or by a body such as the Meeting of the Contracting Parties (Art.300(4)).¹⁶⁷ Hence, the effective party to the day-to-day operation of international agreements is usually the Commission and not the Council.

Whereas previously the Council could proceed to concluding an agreement only by unanimity, now it acts by a 'qualified majority' upon a Commission proposal; unanimity is still the rule, however, when the agreement covers a field for which unanimity is required for the adoption of internal rules, and for association agreements (Art.300(2)). Moreover, while the Parliament was previously consulted only to the extent the Treaty explicitly provided so, after the Maastricht Treaty came into effect it is always consulted, except in relation to agreements in the field of the common commercial policy (Art.300(3)).¹⁶⁸ More importantly, association agreements, other agreements establishing a specific institutional framework by organising co-operation procedures - as several conventions organising environmental regimes do -, agreements having important budgetary implications, and agreements entailing amendment of an act adopted under the 'co-decision procedure', are concluded only after the assent of the Parliament has been given, while in urgent situations the Council and the Parliament may agree on a time limit for the assent.

2.2.2.2. The Position of International Environmental Agreements in the Community Legal Order.

Once the Community has been duly bound by an international convention, a question arises as to the placing of the rules contained therein in the legal hierarchy of the Community legal order as such. In practice, when doubts on the compatibility of an envisaged agreement with the Treaty arise,¹⁶⁹ the Council, the Commission, or a Member State may ask the ECJ to deliver an Opinion

¹⁶⁵ In the context of the 1974 Paris Convention, see Haigh, *op.cit.* n.165, pp.241-2.

¹⁶⁶ See McGoldrick, *op.cit.* n.150, Chapter 6.

¹⁶⁷ See, for instance, EC Commission, Recommendation for a Council Decision authorizing the Commission to negotiate on behalf of the Community measures concerning bathing water, shellfish water [etc.]...under the Convention for the Protection of the Mediterranean Sea against Pollution, COM(85) 362 final, 8.07.1985.

¹⁶⁸ Actually, a time limit in which the Parliament must deliver its opinion is set by the Council depending on the urgency of the matter; if that period elapses without an opinion, the Council may proceed alone.

¹⁶⁹ When agreements concluded by Member States before the EC Treaty entered into force are incompatible with Community law, all appropriate steps must be taken to eliminate the incompatibilities (Art.307). In any case, the rights of third states against Member States created in this way are not affected by Community law, whereas Community rights and obligations are still valid as between Member States.

(Art.300(6)); should the Opinion be adverse, the agreement may enter into force only in accordance with the Treaty amendment procedure, as laid down in Article 48 of the Treaty on European Union.¹⁷⁰

Agreements properly concluded in the above sense effectively bind the Community and its Member States (Art.300(7)), form an integral part of Community law and fall within the competence of ECJ.¹⁷¹ The implication of Article 300 with regard to secondary Community law, although not explicitly articulated, seems to be that the Community must observe its international undertakings - according to the *pacta sunt servanda* rule - and ensure that its Members do the same, by issuing a harmonisation instrument where necessary replacing possible pre-existing and conflicting rules.¹⁷² Hence, the Community is ultimately responsible for Member State compliance with environmental obligations undertaken at the international level.¹⁷³ Even if it does not act at all, it may not issue secondary legislation contrary to the international obligations; moreover, already existing rules with such dispositions will be subject to judicial review, on the grounds of breach of Article 300(7).

Now, all national law - including constitutional rules - is inapplicable if in conflict with the EC Treaty or directly applicable secondary law - uniquely in the international plane, since all international acts require ratification before they can be translated into domestic law.¹⁷⁴ If, in turn, international agreements binding on the Community are integrated in its legal order, that would signify that they would bind all Member States exactly as the rest of Community rules, i.e. without waiting for ratification by each national Parliament.

To support this conclusion, the ECJ has ruled that international agreements to which the Community is a party may have 'direct effect', if they impose clear and precise obligations that are not subject to the adoption of any subsequent measure;¹⁷⁵ such provisions, should they confer rights on citizens, can be invoked before national courts.¹⁷⁶ This dictate has particular practical importance when not every Member State is party to an international convention, or when there is no detailed Community legislation on a subject-matter, as all assume the relevant obligations indirectly - by means of Community and not general international law.

The significance of Community joining environmental regimes does not end here, however; even when all Member States are parties to a convention and implement it at the national level, the

¹⁷⁰ See J.Groux & Ph.Manin, *The European Communities in the International Order*, 1984, pp.117-8.

¹⁷¹ See Cases 21 to 24-72, *International Fruit Company*, 1972 *E.C.R.*, p.1219; Case 181-73, *Haegeman*, 1974 *E.C.R.*, p.449; Case 10-/81, *Kupferberg*, 1982 *E.C.R.*, p.3641, at para.17; Hession, *op.cit.* n.159, p.184; McGoldrick, *op.cit.* n.150, Chapter 7; and Hartley, *op.cit.* n.154, pp.176-81 and 216-7.

¹⁷² See *International Fruit* and *Haegeman* Cases.

¹⁷³ But the Community strangely does not in itself monitor the implementation of the conventions to which it has acceded, see Krämer, *op.cit.* n.58, pp.18 and 283-4; and *infra*, Chapter 5, p.232, and Chapter 7, pp.322-3.

¹⁷⁴ On the notion of 'direct effect' see *infra*, Chapter 7, pp.322-5.

¹⁷⁵ See Case 12/86, *Demirel*, 1987 *E.C.R.*, at para.14; and McGoldrick, *op.cit.* n.150, pp.126-33.

¹⁷⁶ Case 87-75, *Bresciani*, 1976 *E.C.R.*, p.129; Case 104-81, *Kupferberg*, *op.cit.* n.172, p.3641.

EU, as such, becomes bound and has to proceed with relevant action in implementation of the agreement, for example, monetary or other contributions etc., only after it has become a distinct party. That is particularly important in environmental treaties establishing continuous regimes of co-operation, such as those encountered in the Mediterranean.

Another significant extract from ECJ jurisprudence declares acts of organs established under international agreements, such as those of the Meeting of the Contracting Parties of MAP, if legally binding at the international plane, “an integral part of the Community legal system”,¹⁷⁷ and thus also binding on the EU and its Members with ‘direct effect’. In the context of MAP, the EU delegation accept the various recommendations mainly those implementing the Athens Protocol *ad referendum*, subject to the appropriate administrative procedures of the Community.¹⁷⁸

Finally, it should be noted at this point that there is a very significant reverse aspect of the issues discussed in the preceding pages, namely the export of Community environmental legislation to the international plane through co-operation agreements with third countries. This issue, however, will be discussed in detail in Chapter 6.

2.3. Concluding Remarks.

After having examined all the major sets of international rules that relate to the protection of the Mediterranean Sea against pollution, let us make, by way of conclusion, two closely related points that seem particularly relevant to the central thesis argued in Part II of this study. Firstly, it is evident that activities involving ships, be it dumping, or transport of goods or waste, have a transnational character since ships move between different jurisdictions, and hence the potential of directly involving other states in any relevant follow-up and enforcement procedures. On the contrary, control of pollution caused mainly by land-based sources, but also offshore exploitation, is not linked to any other state’s interest and/or jurisdiction, but is entirely left to the domestic legal system. It follows that only indirectly can international actors interfere and challenge the way a state has carried out the tasks it has been assigned by international law.

Secondly and more importantly, in this Chapter we saw how the international rules for the protection of the Mediterranean Sea against pollution evolved from an aspirational ‘framework’ to more or less specific commitments in the context of MAP, and from a rather piece-meal approach to integrated pollution control in the context of the EU. The ever-expanding scope and character of this legal framework, now arguably covering to a lesser or greater extent any possible polluting source and often being fairly detailed and technical, is a clear indication that states have accepted that the world community has an interest in controlling activities carried out within their exclusive

¹⁷⁷ See Case 30/88, *Greece v. Commission*, 1989 *E.C.R.*, p.3711; and Case C-192/89, *Sevince*, 1990 *E.C.R.*, p.I-3461.

¹⁷⁸ See, e.g. UNEP, *op.cit.* n.54, pp.6, 10 and 13.

jurisdiction and in preserving and improving the quality of their own marine environment, irrespective of any possible transboundary effect. This 'internationalisation' of the domestic environment,¹⁷⁹ has thus curtailed their absolute sovereignty and discretion as to what conduct is allowed and indeed required within national borders. If that is to become anything more than a theoretical notion with little real impact, however, it should have as a corollary a comparable intrusion of international law in the follow-up process within national jurisdictions so as to ensure compliance with the standards laid down at the international level. The implications of the above will be further pursued in subsequent Chapters.

¹⁷⁹ On this notion, see also *infra*, Chapter 8.

PART II

CONTROL OVER COMPLIANCE

Chapter 3.

INTERNATIONAL ENVIRONMENTAL LAW AND THE EVOLUTION OF COMPLIANCE CONTROL MECHANISMS.

After Part I provided necessary contextual information on points of law and of fact, Part II will now focus on the core issues that inform the present thesis, namely existing and emerging mechanisms to control compliance with international environmental law on the protection of the Mediterranean Sea against pollution. This Chapter introduces the topic:

The first Section reviews the evolution of mechanisms used to secure compliance during the course of development of international environmental regulation, i.e. from the late 19th century to the present days. Four phases are distinguished in this context: The first starts in the late 1800s and ends with the creation of the United Nations system in 1945; although this is an era in which the pace of formation of international environmental law - and international law in general, for that matter - is slow, state responsibility and sanctions are already in place in order to respond to any breach of obligation. The second phase lasts from 1945 to the Stockholm Conference in 1972, and is marked by more intense environmental law-making, the proliferation of international institutions, and the emergence of innovatory compliance-control procedures, especially in the context of international labour law and human rights protection. The third period covers twenty years of rapid growth of international environmental regulation, from 1972 to 1992, during which one can observe the actual formation of a substantial body of primary rules, distinct legal principles, as well as follow-up techniques that are still valid. Finally, the fourth phase begins at the Rio Conference on Environment and Development and is still evolving. In view of the substantive legal coverage of a wide variety of regional and global, sectoral and trans-sectoral issues and also of the increasing awareness surrounding proper fulfilment of relevant obligations that has been achieved up to now, this is probably the stage where the maturity of international environmental law as a system of relatively well-respected - and thus potentially effective - standards will be tested.

Finally, the second Section of this Chapter reviews the various compliance-control mechanisms as they have evolved with a view at identifying the needs they address and the legal notions they accommodate, as well as the flaws and inadequacies inherent in each one of them, in order to make an initial assessment of their utility in the context of international law for the protection of the Mediterranean Sea against pollution.

3.1. A Historical Account of the Evolution of Compliance Control Mechanisms with Emphasis on the Marine Environment.¹

3.1.1. Late 19th Century to the Establishment of the United Nations System.

The early years of international environmental law-making are characterised by sparse attempts at preserving certain wild species, perceived as threatened at the time, especially fish, birds, and marine mammals, as well as protecting particular shared watercourses from detrimental human impact, including pollution.² The resulting instruments are mostly bilateral and follow the wider patterns of international law-making of the period; as such, they are usually not concerned with questions of implementation, or control over compliance with their terms, nor they create any institutional structures to follow-up their application.³ However, there has always been an implicit presumption that the parties will adopt any necessary national legislation and in general conform to the rules laid down in the treaties acting in good faith, according to the fundamental requirement of international law that *pacta sunt servanda*.⁴

During this period, the general course of action available to challenge any type of behaviour in contravention with specific treaty commitments - or customary international rules, for that matter - was that of an interstate claim of responsibility for breach of obligation,⁵ notwithstanding the fact that the law on state responsibility was controversial at the time and certainly far from clear.⁶ Such a claim was - and still is - commonly followed by diplomatic means of dispute settlement, i.e. negotiations or consultations between the parties involved, and mediation or conciliation carried out by a third party, and less frequently by judicial means, i.e. arbitration or adjudication with binding force.⁷ As early as the beginning of the 20th century there were already in place two judicial organs to deal with international disputes, the Permanent Court of Arbitration and the Permanent Court of International Justice; nonetheless, *ad hoc* arbitral tribunals have always been a favoured

¹ On the history of international environmental law-making, see generally A.Kiss & D.Shelton, *International Environmental Law*, 1991, at Ch.II; and P.Sands, *Principles of International Environmental Law*, Vol.I, 1995, pp.25-62.

² See Sands, *op.cit.* n.1, pp.26-9; and V.P.Nanda, *International Environmental Law and Policy*, 1995, pp.73-5.

³ See Sands, *op.cit.* n.1, p.28. A notable exception is the International Joint Commission, established by the 1909 US-Canada Boundary Waters Treaty, and whose functions included approval of projects that would alter the flow of the waters, surveillance and monitoring, as well as dispute settlement.

⁴ See also Vienna Convention on the Law of Treaties, Art.26; and Exchange of Greek and Turkish Populations Case, 1925, *P.C.I.J.*, Ser.B, No.10, p.20. According to the Court, it is a "self-evident" principle that "a state which has contracted valid international obligations is bound to make in its legislation such modifications as may be necessary to ensure the fulfilment of the obligations undertaken".

⁵ See generally, C.Eagleton, *The Responsibility of States in International Law*, 1928; and J.C.Witenberg, 'La Recevabilité des Réclamations devant les Jurisdictions Internationales', 41 *Receuil des Cours*, 1932/III, pp.5-132. On the historical roots of state responsibility and the relevant literature up to 1930, see I.Brownlie, *System of the Law of Nations - State Responsibility*, Part I, 1983, Chapter I.

⁶ Hence, e.g., the 1930 Hague Conference for the Codification of International Law was unable to reach agreement on the issue of state responsibility for damage caused in the territory of a state to the person or property of foreigners included in its agenda, see S.Rosenne (ed.), *League of Nations Conference for the Codification of International Law (1930)*, 4 Vols, 1975, esp. at Vol.4, Annex II, p.169.

⁷ See, among others, J.G.Merrills, *International Dispute Settlement*, 3rd ed., 1998; and J.Collier & V.Lowe, *The Settlement of Disputes in International Law - Institutions and Procedures*, 1999.

procedure for the resolution of legal conflicts because of the considerable flexibility they allow in the choice of their members and of the applicable law.

In fact, arbitration was the means chosen to resolve the two well-known environmental disputes of the period, namely the controversy between the United States and Great Britain regarding overexploitation of fur seals in the Behring Sea,⁸ and the United States claim for reparation of damage caused by a Canadian smelter at Trail.⁹ Both cases have been extensively analysed and used by international lawyers,¹⁰ and their important contribution in the development of international environmental law has been repeatedly stressed.¹¹ However, none of them was premised on a conventional violation, nor do they contribute substantially to the clarification of the rules on responsibility for non-compliance with environmental obligations,¹² understandably so, in view of the very thin body of relevant obligations at that time. What can, nevertheless, be learned from the Trail Smelter case is how slow and cumbersome the process of interstate claims can be, considering that the first relevant claims were raised in 1926 and the final award given only 15 years later.¹³ This arbitration is also important in that it acknowledges for the first time that - apart from the area of treatment of aliens and their property, where it has been traditionally used - state responsibility is in principle capable of application in cases of transfrontier pollution.¹⁴

When a party was actually found responsible for breach of international law, the principle remedy it was liable to provide was reparation,¹⁵ either in the form of *restitutio in integrum* or damages; the relevant *dicta* from the 1927 and 1928 Chorzów Factory cases are even today frequently quoted as a major authority on this point.¹⁶ The Trail Smelter award also indicates that the responsible state may incur the burden of taking measures to prevent repetition of the harm caused. However, as breach of treaty stipulations is only one of many legal bases on which state

⁸ See the Behring Sea Fur Seals Fisheries Arbitration, 1 *Moore Int'l Arb. Awards*, 1898, p.755.

⁹ See the Trail Smelter Arbitration, 33 *A.J.I.L.*, 1939, p.182; 35 *A.J.I.L.*, 1941, p.684.

¹⁰ On Fur Seals, see, among others, D.M.Johnston, *International Law of Fisheries: A Framework for Policy Oriented Enquiries*, 1965, pp.205-12; and M.S.Mc Dougal & W.T.Burke, *The Public Order of the Oceans*, 1987, pp.942-50. On Trail Smelter, see, among others, A.P.Rubin, 'Pollution by Analogy: The Trail Smelter Arbitration', 50 *Oregon L.Rev.*, 1971, pp.259-82; F.L.Kirgis, 'Technological Challenges to the Shared Environment: United States Practice', 66 *A.J.I.L.*, 1972, pp.295-300; and B.D.Smith, *State Responsibility and the Marine Environment - The Rules of Decision*, 1988, pp.72 *et seq.* and 113 *et seq.*

¹¹ See, e.g., Sands, *op.cit.* n.1, p.28; and P.W.Birnie and A.E.Boyle, *International Law and the Environment*, 1992, p.494.

¹² It should be reminded here that Canada had already accepted responsibility in the relevant *compromis* that was signed before the arbitration, and thus the tribunal did not deal with the issue.

¹³ As has been pointed out by Kiss & Shelton, *op.cit.* n.1, p.347. The same delay has been experienced in the context of the much more recent Gut Dam Arbitration, see 8 *I.L.M.*, 1969, p.118.

¹⁴ Kiss & Shelton, *op.cit.* n.1, p.348.

¹⁵ See generally, C.Gray, *Judicial Remedies in International Law*, 1990; and *infra*, Chapter 4, pp.146-8.

¹⁶ Chorzów Factory Case (Jurisdiction), 1927, *P.C.I.J.*, Series A, No.9, p.21; and Chorzów Factory Case (Indemnity), 1928, *P.C.I.J.*, Series A, No.17, esp. at pp.29 and 47.

responsibility can be invoked,¹⁷ a look at specific cases where breach of treaty was alleged, not necessarily entailing tangible damage to the claimant, reveals that, although reparation was sometimes requested, more often the remedy sought was simply a declaratory judgement authoritatively attesting that the defendant has acted in contravention of certain conventional rules.¹⁸ Then, the actual remedy would be the satisfaction of the claimant and the international obligation of the defendant to discontinue the breach.

In the specific area of the law of treaties, a state was also entitled,¹⁹ under customary law as it has been later partially codified in Article 60 of the Vienna Convention, to seek to redress the balance of interests upset because of a violation by partially or totally suspending the operation of the relevant agreement.²⁰ A related response was that of reciprocal non-performance without formal suspension of the treaty, which was the most common type of reprisal, or some other act of proportional retaliation.²¹ These theoretical possibilities of applying sanctions, however, have not been tried in practice in environmental disputes, not only during the years examined, but also, as Schachter points out,²² in the following decades of more intense environmental law-making.

That said, there are exceptional instances of treaty provisions which, although they do not alter the overall state of international law, explicitly address issues of compliance, enforcement and dispute settlement; this is especially the case in fisheries agreements laying down norms which go beyond the established division of jurisdictional competences under the law of the sea.²³ The 1921 Agreement between the Kingdom of Italy and that of Serbs, Croats and Slovenes regarding the Regulation of Fishing in the Adriatic is remarkable in this connection, as it lays down compliance control and enforcement principles and procedures that will become common in international environmental regimes, especially those regulating shipping activities, only several decades later.

More specifically, the Agreement devotes a separate Chapter to the rules concerning supervision of joint fishing grounds (Chapter V), whereby the enforcement authorities of the Parties are under an explicit duty to co-operate in order "to prevent any infringement of the regulations laid

¹⁷ See Brownlie, *op.cit.* n.5, Chapter V, where the author lists no less than twenty six different causes of action, although most of them would fall under a general heading of international customary law violations.

¹⁸ *Ibid.*, pp.61-2.

¹⁹ In fact, it seems that *any* party to a multilateral treaty was entitled to invoke a breach by another state in order for the former to be relieved from further performance of its own obligations, see Harvard Draft Convention on the Law of Treaties, 29 *A.J.I.L. Suppl.*, 1935, pp.1077 and 1092.

²⁰ See *Namibia* Advisory Opinion, 1971 *I.C.J. Reports*, p.47; B.Simma, 'Reflections on Article 60 of the Vienna Convention on the Law of Treaties and its Background in General International Law', 20 *O.Z.O.R.*, 1970, pp.5-83; and R.Jennings & A.Watts (eds.), *Oppenheim's International Law*, Vol.1, (9th ed.) 1992, pp.1300-3.

²¹ See *Air Services Agreement* Arbitration, 54 *I.L.R.*, 1978, pp.304 and 335-41. On the various counter-measures available to respond to a violation of international law, see O.Schachter, *International Law in Theory and Practice*, 1991, at Chapter IX.

²² Schachter, *op.cit.* n.21, p.381; and *infra*, Chapter 4, pp.150-3.

²³ Thus, for example, the 1923 US-Canada Convention for the Preservation of Halibut Fisheries in the Northern Pacific Ocean gives reciprocal arrest rights in the high seas and in areas under the jurisdiction of the arresting state, with regard to fishing vessels registered in the Parties which are caught violating agreed regulations (Art.2).

down in the... Convention" (Art.37) - a concept reminiscent of the port authorities co-operative regimes for ship-pollution control introduced in the 1980s -²⁴ and are entitled to inspect each other's vessels (Art.38). The Parties must ensure that their officials are given detailed instructions on how to establish violations of the said regulations (Art.39); that every possible assistance is given to the foreign authorities during the judicial process following a violation (Art.41); that the masters of delinquent vessels are held personally responsible for any fines incurred (Art.40); that penalties inflicted for various offences are, to the extent possible, identical in both countries (Art.42), and fines levied are duly paid (Art.41); and that fishermen repeatedly found in violation of certain prohibited rules are deprived of their fishing permits (Art.44).

A Permanent Adriatic Fisheries Commission is additionally established (Chapter VII), in which, besides state officials, representatives of the fishing interests participate (Art.50). This organ has the mandate to co-operate with the Parties' authorities in order, among others, to prevent any disputes likely to arise from the application of the Convention (Art.51). It is equally noteworthy that, under this instrument, the Parties undertake to submit to the Commission quarterly reports on their enforcement activity, as well as "all the observations which have been made and the difficulties noted in connection with... the application of the... Convention" (Art.43), i.e. they have a self-reporting obligation coupled with an implicit assignment to the standing body of the task of deliberating on any obstacles to effective implementation, and possibly recommending corrective measures. Moreover, any modifications to national regulations concerning conservation measures may be put in force by the two states "acting in agreement" and after consultation with the Commission (Art.53), which points to a considerable external constraint placed on the domain of national legislation.

3.1.2. 1945 to the Stockholm Conference.

The end of the Second World War is marked with the creation of the United Nations system of international law-making and dispute settlement. The former is primarily effected under the auspices of a great number of specialised agencies that are being set up, while the latter is streamlined by the UN Charter which outlaws the use of war as a method for settling international disputes and commits all states to the use of one of the above-mentioned peaceful means of conflict resolution, listed in Article 33.

The organisations of the UN system henceforth become the *fora* where the most important multilateral treaties are negotiated, but also the permanent institutional structures entrusted with follow-up and dispute settlement functions in relation to these instruments. This leads to the development of innovative and sophisticated follow-up procedures, which will be duplicated in the environmental sphere, much later, if at all. The most characteristic example is that of the intricate,

²⁴ See *infra*, Chapter 5, pp.212-7.

but largely effective compliance-control system of the International Labour Organisation (ILO), which comprises *quasi*-judicial phases entrusted to independent bodies that examine complaints filed by any interested party, including NGOs, and political phases of consideration by the legislative and administrative bodies of the Organisation, combined with technical assistance and capacity-building.²⁵

A similar in many aspects development took place during this period in the field of human rights. Here, a series of global and regional regimes of protection were put in place,²⁶ marked by the establishment of supervisory commissions,²⁷ such as the Commission on Human Rights of the UN Economic and Social Council and the European Commission of Human Rights. These organs receive national reports on implementation and decide on complaints regarding non-compliance when the state concerned has consented to such a competence. In their latter function, therefore, the Commissions are formal judicial *fora* with jurisdiction to declare breaches of human rights norms. A very notable feature of these regimes has also been the attribution of standing to press relevant complaints to any state, as well as individuals and NGOs.²⁸

The factor that conditions these developments is the nature itself of these new areas of international regulation: The international community establishes an interest in the protection of certain goods and groups of people situated exclusively within national borders and thus intrudes on the previously reserved internal domain of each state by means of principally multilateral conventions. As no direct 'injury' to other states is involved, there is a need to move forward from the traditional notions of state responsibility and devise *ad hoc* procedures to ensure respect for the law, administered collectively by the competent international structure,²⁹ and to give standing to those that are in effect harmed by any violation thereof, i.e. not just states, but also individuals and their associations. In parallel, some traditional concepts are also altered to accommodate the new realities: the notion of the 'injured' state that is entitled to invoke state responsibility is broadened to cover all countries in relation to obligations *erga omnes*,³⁰ while reciprocal non-

²⁵ See, among others, N.Valticos, 'The International Labour Organization', in S.M.Schwebel (ed.), *The Effectiveness of International Decisions*, 1971, pp.134-55, esp. at 144-53; and E.Landy, *The Effectiveness of International Supervision: Thirty Years of ILO Experience*, 1966.

²⁶ See, among others, A.H.Robertson and J.G.Merrills, *Human Rights in the World*, (3rd ed.), 1992; T.Meron (ed.), *Human Rights in International Law: Legal and Policy Issues*, 3 Vols., 1984; and H.Lauterpacht, *International Law and Human Rights*, 1973.

²⁷ As well as fact-finding bodies, see UN, United Nations Action in the Field of Human Rights, ST/HR/2/Rev.2, 1983.

²⁸ See, among others, L.B.Sohn and T.Burgenthal (eds.), *International Protection of Human Rights*, 1973, esp. at pp.739-71, and Chapter V, for the origins of individual standing in the League of Nations Trusteeship Mandates; P.-M.Dupuy, *Droit International Public*, 1993, Première Partie, Chapitre 3; and E.W.Vierdag, 'Some Remarks about Special Features of Human Rights Treaties', XXV, *Neth.YB.I.L.*, 1994, pp.134-42.

²⁹ On the emergence of 'co-operative international law', mainly effected through the functioning of international organisations, and the importance of the 'sanction' of non-participation therein, see W.Friedman, *The Changing Structure of International Law*, 1964, pp.88-95.

³⁰ See the *Barcelona Traction* Case, 1970 *I.C.J. Reports*, p.3; and K.Sachariew, 'State Responsibility for Multilateral Treaty Violations: Identifying the "Injured State" and its Legal Status', 35 *Neth.I.L.Rev.*, 1988, pp.273-289, for a (continued...)

compliance with, and suspension or termination of treaty rules is explicitly barred under the Vienna Convention on the Law of Treaties (Art.60(5)) in the human rights area.

Brief reference must be made to the emergence, during this period, of a distinct regional legal order, that of the European Economic Communities, established in 1957 under the Treaties of Rome. Although environmental considerations became central in the Community agenda only after the Stockholm Conference, the main features of that legal order that have a significant bearing on subsequent developments with regard to compliance control are already apparent in the period under discussion. These include the supremacy of Community law over domestic legislation of Member States,³¹ and its 'direct effect' in national legal orders, and the incremental strengthening of institutions with extensive compliance-control powers, such as the European Parliament, and most importantly the Commission and the European Court of Justice.

Although conservation and pollution concerns become more prominent during this period, and were included in the agenda of several specialised agencies, such as FAO, the ECE, and UNESCO,³² as well as regional organisations outside the UN system, e.g., the Council of Europe or the Organisation of African Unity,³³ in the field of environmental protection there was no international organisation with any well-defined or comprehensive mandate to address relevant concerns.³⁴ Most of the activity undertaken was oriented towards studies of environmental problems, as well as drafting of 'soft' instruments, such as recommendations, as opposed to binding international conventions. Consequently, the question of compliance does not really arise as yet.

Even in the context of regional fisheries commissions, or the International Whaling Commission, that were being set up at the time, conservation was only a secondary consideration needed to guarantee better conditions of exploitation of the marine living resources, whereas bilateral river commissions that proliferated considerably during this period were only marginally concerned with pollution issues in the broad context of utilisation of international fresh waters.³⁵ Hence, international environmental regulation continued to be piece-meal and *ad hoc*, lacking a broad framework of principles, although it was at that stage proceeding at a faster pace.

³⁰(...continued)

discussion of the evolution of 'multilateralized' responsibility in treaty regimes. It should be reminded that rights to apply for judicial determination of breach without having to prove injury to the applicant's individual rights first appear in the Mandate Agreements, see the Mayrommatis Palestine Concessions Case (Jurisdiction), 1924, *P.C.I.J.*, Ser.A, No.2.

³¹ See Case 26/62, Van Gend en Loos v. Netherlands Inland Revenue Administration, 1963 *E.C.R.*, p.1.

³² See Sands, *op.cit.* n.1, pp.29-34; Kiss & Shelton, *op.cit.* n.1, at Chapter III; and Birnie & Boyle, *op.cit.* n.11, pp.53-63.

³³ See Kiss & Shelton, *op.cit.* n.1, pp.37-8.

³⁴ It is characteristic that the first convention regulating oil pollution from ships, the 1954 OILPOL, was not concluded under the auspices of IMO, although its administration was transferred to that organisation when it entered into force in January 1959.

³⁵ In the Mediterranean, after the Second World war, Yugoslavia, for instance, entered into several such agreements with its neighbouring countries.

Polluting sources that attracted international attention during this period were oil discharges from ships and nuclear testing and production;³⁶ in the early 70s there were also efforts at regulating the dumping of waste at sea.³⁷ The respective instruments were basically confined to prohibiting certain practices,³⁸ or attributing exceptional powers to states whose interests were threatened by a situation of ecological emergency.³⁹ In some instances, they even went as far as establishing certain substantive standards,⁴⁰ and/or conditions,⁴¹ that should be observed when undertaking a polluting activity.

Prescriptions on what a state must specifically do in order to implement and enforce international rules are beginning to be laid down in explicit terms in these conventions, while actual enforcement jurisdiction remains with individual countries.⁴² This progress is mainly due to increasing appreciation of the fact that conformity with substantial requirements imposed on ships and aircraft registered in any particular party should be easily verified wherever the vessel may be, a possibility encouraged by the transnational nature of relevant activities.⁴³ There are, indeed, already instances of co-operative action to enforce international environmental standards, especially among Northern and Western European states, where environmental concerns and close political ties create the necessary conditions.⁴⁴

Another significant type of arrangement that is increasingly used is the procedural requirement to report on national measures to implement and enforce a particular agreement to a permanent body entrusted with follow-up functions, either exclusive to the specific regime,⁴⁵ or to

³⁶ See the 1958 Convention on the High Seas, Arts.24 and 25; the 1954 OILPOL; and the 1969 Intervention Convention. At the regional level, see the 1969 Agreement Concerning Co-operation in Dealing with Pollution of the North Sea by Oil; and the 1971 Nordic Agreement Concerning Co-operation in Taking Measures against Pollution of the Sea by Oil. See also the 1963 Test Ban Treaty; and the 1959 Antarctic Treaty which prohibits all nuclear activity on Antarctica.

³⁷ See the 1972 London and Oslo Dumping Conventions.

³⁸ See, e.g. the 1963 Test Ban Treaty.

³⁹ See, e.g., the 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas, Art.7; and the 1969 Convention relating to Intervention on the High Seas in Cases of Oil Pollution Damage.

⁴⁰ See, e.g., the OILPOL.

⁴¹ See, e.g., the 1972 London Dumping Convention.

⁴² See the OILPOL, whereby the flag state must ensure that its ships comply with the Convention (Art.II), that offenders are punished (Art.III(3)) with penalties not less strict than those imposed for the same infringements in the territorial sea (Art.VI), and investigate allegations submitted by other Parties and institute proceedings (Art.X(2)); and the London Convention, whereby the Parties have to ensure that all vessels and aircraft registered in their territory, or loading therein matter to be dumped, or engaged in dumping in areas under their jurisdiction comply with the conventional stipulations, and prevent and punish infringements (Art.VII).

⁴³ See, e.g. OILPOL, Art.IX, whereby the ship must carry an oil record book that can be inspected by the port authorities of any Party.

⁴⁴ See, e.g., the 1967 Agreement between Denmark, Finland, Norway and Sweden concerning Co-operation to Ensure Compliance with the Regulations for Preventing Pollution of the Sea by Oil; the 1969 North-East Atlantic Fisheries Commission's Scheme of Joint Enforcement, *N.D.*, Vol.I, p.484; and the 1952 International Convention for the High Seas Fisheries of the North Pacific Ocean.

⁴⁵ See, e.g., the London Convention, Art.VI, whereby state authorities have to report on the permits issued by them to the Consultative Meeting of the Parties; and Art.XIV, whereby the Meeting is assigned with the task of keeping under review the implementation of the Convention; and the 1972 Oslo Dumping Convention, Art.17.

the international institution administering the relevant instrument.⁴⁶ On the other hand, dispute settlement is still viewed as a bilateral issue, placed in the traditional framework of state responsibility and accomplished by one or more of the means listed in Article 33 of the UN Charter. Relevant clauses contained in environmental agreements of the period vary considerably, but do not break any new ground.⁴⁷

Lastly it should be noted that, despite lack of notable international disputes arising out of environmental issues during this period, there is an increasing concern among governments and the public, at both the international and domestic level, with the occurrence of accidents involving tankers and resulting in considerable damage to private and public interests in coastal states. This leads to the adoption of international conventions which - building on long accepted principles and agreements relating to liability for maritime claims -⁴⁸ establish uniform rules to be applied by national courts for the imposition of civil liability to tanker owners, irrespective of any fault on their part, including non-observance of international standards, i.e. strict liability, and the assessment of damages up to a limited amount of compensation, with additional resort to funds provided by the oil industry.⁴⁹ Similar developments, albeit prompted from different reasons, occur in the area of production and maritime transport of nuclear matter and of the operation of nuclear ships.⁵⁰ Unlike state responsibility, claims of liability of private persons for damage arising out of oil pollution incidents, submitted and resolved according to procedures specified under these international instruments, henceforth become commonplace.⁵¹

3.1.3. 1972 to the Rio Conference.

The UN Conference on the Human Environment, held in Stockholm in 1972, marked the beginning of an era of rapid development of international environmental law, through adoption of an ever-increasing number of bilateral and, mainly, multilateral conventions covering practically every aspect of pollution and conservation, and the establishment of many organisations with an environmental mandate, ranging from the global United Nations Environment Programme (UNEP)

⁴⁶ See, e.g., the OILPOL, Art.XII, whereby an obligation to report to IMO on the national legislative and enforcement activity is instituted, but note that information deemed 'confidential' may be withheld.

⁴⁷ See, e.g., the OILPOL, Art.XIII, which provides for negotiation, arbitration, and ultimately unilateral submission of the dispute to the ICJ; the 1969 Intervention Convention, Art.VIII, providing for negotiation, and unilateral resort to conciliation or an *ad hoc* arbitration procedure; the 1958 High Seas Convention, Arts.9-12, allowing for unilateral submission of a dispute to a special commission, bearing the characteristics of binding arbitration; and *cf.* Art.18 of the 1968 African Convention on the Conservation of Nature and Natural Resources, which provides for unilateral resort to the Commission of Mediation, Conciliation and Arbitration of the Organisation of African Unity; and the London Convention, Arts.X and XI, whereby the Consultative Meeting of the Parties undertakes to develop procedures for the assessment of liability and the settlement of disputes, in accordance with the principles of international law on state responsibility.

⁴⁸ See the 1957 International Convention relating to the Limitation of Liability of Owners of Sea-Going Ships.

⁴⁹ 1969 CLC; 1969 TOVALOP Agreement; and 1971 Fund Convention.

⁵⁰ 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy; 1963 Vienna Convention on Civil Liability for Nuclear Damage; and 1971 Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material.

⁵¹ See the IOPC Fund Annual Reports.

to the permanent bodies administering specific treaty regimes. In fact, immediately after the Stockholm Conference, the UN General Assembly decided to set up an environmental organisation, UNEP, which, although not enjoying the status of a specialised agency, has been playing a very significant role in the development of international environmental law, both as a catalyst for action and as the administrator of many agreements,⁵² and notably those of the MAP system.

The Stockholm Conference also gave new impetus to the international effort at mitigating marine pollution (Principle 7, Recommendations 86-94). Recommendation 86, in particular, called for adherence and implementation of existing marine pollution instruments and development of new rules, both at the national and international levels. Shortly after the Conference, UNEP, frequently in co-operation with other agencies such as FAO, began its ambitious Regional Seas Programme which today covers practically every region of the world oceans. This important initiative evolved simultaneously with the negotiations for the 1982 Law of the Sea Convention (LOSC), which in Part XII lays down the global principles and rules for the protection of the marine environment.

On the other hand, the Stockholm Conference itself did not address questions of implementation of and compliance with that body of international law to any considerable extent, nor did it introduce any significant innovations. The most relevant Principles enunciated at Stockholm are 21, 22, and 23. The well-known and repeatedly analysed Principle 21 restates the Trail Smelter rule,⁵³ but also extends it to areas beyond national jurisdiction.⁵⁴ Principle 22 requires states to develop international law on state responsibility for environmental damage, and is the modest result of the reluctance of participating states to accept any formulation that would imply a strict standard of liability for environmental harm.⁵⁵ Lastly, Principle 23 acknowledges the importance of domestic determination of certain environmental standards to accommodate different circumstances and social costs and values.

It has already been suggested in the previous Chapter that the degree to which environmental treaties restrain states as to the steps they have to take at the domestic level to implement their international undertakings varies greatly and depends on the nature of the problem addressed and of the law laid down in relevant international instruments. Thus, 'framework' treaties adopted during this period, establish principles and general rules of protection but leave considerable discretion to the parties,⁵⁶ as do agreements purporting to regulate activities within

⁵² See, among others, Kiss & Shelton, *op.cit.* n.1, pp.59-63; and I.Rummel-Bulska, 'United Nations Environment Programme', 1 *Y.B.I.E.L.*, 1990, pp.369-86.

⁵³ See also the Corfu Channel Case, 1949 *I.C.J. Reports*, p.1.

⁵⁴ See, e.g., E.J.de Arechaga, 'International Law in the Past Third of a Century', 159 *Recueil des Cours*, 1978/1, pp.272 *et seq.*; P.-M.Dupuy, 'Due Diligence in the International Law of Liability', in OECD, *Legal Aspects of Transfrontier Pollution*, 1979, pp.345 *et seq.*; Birnie & Boyle, *op.cit.* n.11, pp.91-2; Sands, *op.cit.* n.1, pp.186-94.

⁵⁵ See UN Doc.A/CONF.48/PC.12, 1971, Annex I at 15.

⁵⁶ See, e.g., the 1976 Barcelona Convention and the other Regional Seas framework treaties; the 1979 Convention on Long-Range Transboundary Air Pollution; the 1982 LOSC, Part XII; and the 1985 Vienna Convention on the Protection of the Ozone Layer.

exclusive state jurisdiction, such as land-based marine pollution. On the contrary, when an activity with international elements is regulated, for example international trade of fauna and flora and hazardous matter,⁵⁷ or shipping,⁵⁸ internal actions that are required to bring about the desired control are designated with more precision.

Moreover, a number of treaties, especially those containing detailed prescriptions on national measures to be undertaken, expressly commit their parties to ensure compliance or enforcement of international norms with regard to persons or activities within their jurisdiction or control,⁵⁹ and even to impose sanctions or criminal penalties for relevant violations.⁶⁰ Then, this enforcement activity is typically covered by a reporting obligation, which makes it - at least in theory - collectively controllable at the international level.

A major relative development, that took place in the context of the LOSC, is the attribution of innovative enforcement powers for marine pollution purposes to coastal states over extensive sea areas, through the introduction of EEZs (Art.56), and to port states for pollution offences committed by ships literally anywhere in the world (Art.218). In parallel, port authorities have been involved in co-operative networks, the first being the 1982 Paris Memorandum on Port State Control, with a view to detecting violations of vessel anti-pollution standards. Although falling short of actual enforcement action, this is a type of arrangement for controlling compliance with treaty stipulations that is deemed considerably effective in the specific area of pollution from shipping activities.⁶¹

A technique related to implementation of international - as well as national - environmental norms is that of a prior assessment of the environmental impact of any privately planned activity. Although endorsement of this procedure was slow and fraught with difficulties, it progressed throughout this period,⁶² and, by the end of it, appeared established, at least in the context of marine environmental protection.⁶³

During that period, the EC put in place an extended and distinct body of environmental legislation, and participated in negotiations and activities for global agreements under the auspices of other organisations. As the volume of Community legislation relating to environmental protection grew, it presented significant characteristics facilitating its implementation and enforcement. Environmental Directives seem to be more detailed and technical than most international

⁵⁷ See, eg., the CITES, and the Basel Convention.

⁵⁸ See, e.g., MARPOL.

⁵⁹ See, e.g., CITES, Art.VIII(1).

⁶⁰ See, e.g., Basel Convention, Art.9(5).

⁶¹ See also *infra*, Chapter 5, pp.212-7.

⁶² See Sands, *op.cit.* n.1, Chapter 15; and *infra*, Chapter 8, pp.333 *et seq.*

⁶³ See the 1991 Espoo Convention; EC Directive 85/337; 1989 World Bank Operative Directive 4.00. In the specific context of marine pollution, see the LOSC, Art.206; the 1986 Noumea Convention, Art.16; the 1978 Kuwait Regional Convention, Art.XI; the 1982 Jeddah Regional Convention, Art.XI; the 1981 West and Central Africa Regional Convention, Art.13; the 1983 Wider Caribbean Regional Convention, Art.12; the 1985 East Africa Regional Convention, Art.13; the 1989 South-East Pacific Protected Areas Protocol, Art.VIII; and the 1990 Wider Caribbean Specially Protected Areas Protocol, Art.13.

regulations, and, more importantly, if certain conditions are met, they have a 'direct effect' in national legal orders, thus bypassing - at least in theory - the obstacle of positive government action (or inaction) required to give substance to international law in the internal domain.⁶⁴

Even within other international regimes, the widespread adherence to a pattern of institutional structure, which usually consists of a permanent organ, either in the form of the Meeting of the Parties, or of a commission of independent members, commonly backed by a Secretariat, provided the necessary basis for a continuous elaboration of the respective international standards,⁶⁵ and also for constant review and consideration of implementation problems as they arise.⁶⁶ Apart from their regulatory role, environmental institutions contribute in research and information exchange with regard to concrete environmental problems, and they have in some instances - albeit rarely - been given overall responsibility for the management of particular natural resources.⁶⁷ On the other hand, it is quite common to entrust them with supervisory functions, ranging from extended powers of direct observation and inspection under the 1980 Convention on the Conservation of Antarctic Marine Living Resources and the 1991 Protocol on Environmental Protection of the Antarctica, and the competence of the Sea-bed Authority to undertake enforcement action for, among others, environmental protection purposes, to the standard task of receiving national implementation reports and assessing relevant progress, the latter encountered in practically every environmental regime established during this period.

Although in some instruments, such as the 1989 Basel Convention and the 1987 Montreal Protocol, there is an explicit attribution of a right of supervision to each one of the Parties - as anyone can inform the Secretariat, and through it all other Parties, of any breach that has come to its attention -,⁶⁸ the most common follow-up technique is, in fact, that of self-reporting, a procedure under the tight control of each state concerned. Now, the content of the reporting obligation is dependent on the substantive duties imposed on the parties of each particular treaty, and ranges from a general requirement to provide information on any measures adopted in implementation of the convention,⁶⁹ and on relevant violations by persons under the jurisdiction or control of the reporting party,⁷⁰ to the specific duty to communicate decisions, such as those granting permits, taken by

⁶⁴ See *infra*, Chapter 7, pp.322-5.

⁶⁵ Primary examples being the law-making activity of the Consultative Meeting of the Parties to the London Convention, and of the Meeting of the Parties to the Montreal Protocol.

⁶⁶ See in this connection the work of the IMO Marine Environment Protection Committee in order to further implementation of MARPOL, *infra*, Chapter 5, pp.184-5.

⁶⁷ Under the 1988 CRAMRA, which nevertheless is unlikely to come into force, and the LOSC which entrusts the management of the deep sea-bed to the Authority. On the functions of environmental institutions in general, see Kiss & Shelton, *op.cit.* n.1, pp.56-7.

⁶⁸ Basel Convention, Art.19; and UNEP, Report of the Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, UNEP/OzL.Pro/4/15, 25 November 1992, Annexes IV and V..

⁶⁹ See, e.g., Basel Convention, Art.13(3)(c).

⁷⁰ See, e.g., MARPOL, Art.11(1).

competent national authorities,⁷¹ statistical information on production, imports and exports,⁷² detailed monitoring data,⁷³ etc.

Thus, there is a blanket cover for implementation and follow-up matters by the institutional structures put in place in various environmental regimes. But only by the end of the period examined, financial assistance is starting to be incorporated in these mechanisms, as the principle of 'common but differentiated responsibility' gains acceptance; the primary example is found in the ozone regime. In this connection, there are two parallel - and lately converging - levels at which significant developments took place during these two decades: The first is the level of bilateral or multilateral funding not related to any international regime of substantive environmental regulation; and the second is that of assistance provided under a treaty framework.

Traditionally, bilateral and multilateral international funding rarely entailed environmental considerations. Consequently, evaluations after project implementation suggested a fairly high incidence of environmental damage. Moreover, inadequate attention was paid to institutional weaknesses, and to the broader measures needed to integrate natural resource concerns into investments. The inclusion of environmental assessments in project evaluation, whenever required, also made little difference to the procedures for selecting and designing projects.⁷⁴

In the 1980s, however, the World Bank made some considerable progress - albeit slow and controversial -⁷⁵ towards ensuring the ecological soundness of the projects it finances and devoting more of its resources to environmental actions.⁷⁶ This trend was consolidated at Rio, where the Bank was identified as the principal manager of new financial mechanisms that were set up to address major global concerns regulated by treaty, such as climate change, protection of biodiversity and ozone depletion.⁷⁷

⁷¹ See, e.g., London Convention, Art.VI(1)(c).

⁷² See, e.g., Montreal Protocol, Art.7.

⁷³ See, e.g., 1985 Sulphur Protocol, Art.5.

⁷⁴ See, among others, R.K.Turner, 'Environmentally Sensitive Aid', in D.Pearce (ed.), *Blueprint 2 - Greening the World Economy*, 1991, pp.169-70; and G.Handl, 'Controlling Implementation and Compliance with International Environmental Commitments: The Rocky Road from Rio', 5 *Colo.J.Int'l Env'l L.&Pol'y*, 1994, p.319 at fn.81.

⁷⁵ See K.Horta, 'The World Bank and the International Monetary Fund', in J.Werksman (ed.), *Greening International Institutions*, 1996, pp.131-47. Despite positive steps towards more stringent prior assessment of environmental impacts of the projects funded, as well as increased accountability and transparency, the author concludes that "...the World Bank focuses on approving loans. The environmental and social sustainability of what these loans are financing remains a largely rhetorical preoccupation", p.132.

⁷⁶ See, among others, I.F.I.Shihata, *The World Bank in a Changing World*, 1991, Chapter 4; P.H.Sand, *Trusts for the Earth: New Financial Mechanisms for International Environmental Protection* (The Josephine Onoh Memorial Lecture), 1994, p.15 at fn.47 and 48; and Handl, *op.cit.* n.74, pp.319-21. For relevant information, see World Bank/IBRD, *Mainstreaming the Environment - The World Bank and the Environment: Fiscal 1996*, 1996.

⁷⁷ See Sand, *op.cit.* n.76; and World Bank, *op.cit.* n.76. Note that in 1993 an independent non-governmental forum which examines compliance of the Bank with its own policies and procedures, the World Bank Inspection Panel, was established by Resolution No.93-10. Its task consists in receiving complaints by "any group of two or more people" who believe their rights or interests have been adversely affected in a direct and material way by a Bank's violation. The importance of this institution lies in the implicit recognition of the primary interest of affected non-governmental actors, as opposed to member states, in seeing that the Bank's policies are respected, and in the attribution of formal powers of recourse to the former, see J.Cameron & R.Mackenzie, 'Access to Environmental Justice and Procedural Rights in

(continued...)

The second level at which important developments took place is that of environmental treaty regimes. The 1970s and 1980s witnessed the emergence and evolution of trust funds.⁷⁸ Peter Sand has identified four main categories of international funds devoted to environmental protection, two of which are directly linked with treaty regimes.⁷⁹

The first one is the "standard type" of trust fund for earmarked contributions to support the administration of various treaty regimes, such as the Mediterranean Trust Fund in the framework of MAP. Although their budgets are almost always small, these funds have resulted in environmental regimes becoming self-supporting, as well as in an increasing recognition of the special funding needs of developing states in order "to enable them to join on a more equitable footing" in the regime's governance.⁸⁰ The second type involves funds that are designed to compensate states for certain environmental activities of global interest, or to subsidise national compliance with environmental treaties, such as the Montreal Protocol Multilateral Fund.⁸¹

It is, indeed in the context of the ozone regime that the most significant development in the area of international trust funds took place. More specifically, the 1990 Amendments to the Montreal Protocol established an '*interim* financial mechanism' in order to meet the incremental costs incurred by developing countries for their compliance with the Protocol, principally the phase-out of ozone-depleting substances (Art.10),⁸² and became the first international environmental instrument that made implementation of international obligations dependent upon receipt of financial resources and the transfer of technology (Art.5(5)).⁸³ Despite its modest size, this arrangement is justly considered a "turning point" in international environmental law;⁸⁴ from then on finance and technology transfer have become central issues in international environmental law-making and their importance for achieving the objectives of international regulation is consolidated.

But when it comes to international enforcement, developments were hardly dramatic during this period. In fact, the paradigm of human rights regimes discussed above, which gives standing to any state without having to prove a special 'injury', and to affected individuals or concerned

⁷⁷(...continued)

International Institutions', in A.E.Boyle & M.R.Anderson (eds.), *Human Rights Approaches to Environmental Protection*, 1996, pp.147-9.

⁷⁸ See Sand, *op.cit.* n.76, pp.4-15.

⁷⁹ See *ibid*, esp. at pp.28-32. The other two categories of international trust funds relate to the protection of resources that remain strictly under national sovereignty, such as the Rain Forest Trust Fund, and to international financing of national environmental funds.

⁸⁰ See *ibid*, p.13.

⁸¹ In this context the issue of old treaties based on the principle of egalitarian reciprocity among parties, as opposed to new concepts of 'differentiated responsibility' and the resultant 'asymmetrical' obligations becomes central, see *ibid*, p.30. The follow-up question, that was actually raised during UNCED preparatory work, is whether old treaties not providing for such entitlement to incremental subsidies should be revised, or otherwise considered 'unequal'.

⁸² Adopted at the Second Meeting of the Parties, see UNEP, Report of the Second Meeting of the Parties to the Montreal Protocol on Substances that deplete the Ozone Layer, UNEP/OzL.Pro.2/3, 29 June 1990.

⁸³ See, among others, J.M.Patlis, 'The Multilateral Fund of the Montreal Protocol: A Prototype for Financial Mechanisms in Protecting the Global Environment', 25 *Cornell I.L.J.*, 1992, pp.181-230.

⁸⁴ Sands, *op.cit.* n.1, p.727; and *infra*, Chapter 5, pp.219-20.

NGOs, to challenge a breach of treaty rule in front of a competent body, has not generally been reproduced in the field of international environmental law,⁸⁵ nor has there been any state practice that would alter this picture. Consequently, the existence of obligations *erga omnes* in the environmental sphere has not had a chance to be tested.⁸⁶ Only in the context of the Community legal order has every Member State and the Commission an unlimited right - and as far as the Commission is concerned, actually a duty - to seek enforcement of environmental legislation against states that violate it.⁸⁷

That said, the typical provision found in environmental treaties requires that the Meeting of the Parties reviews implementation of the convention on the basis of national reports and recommends any action it deems appropriate to improve its effectiveness.⁸⁸ That falls well short of attributing any meaningful enforcement powers to the international organisation, or of designating an enforcement and/or dispute settlement procedure against violators.

A breakthrough in this connection occurred only in 1990, when a formal 'non-compliance procedure' was put in place for the first time within the ozone regime. The Second Meeting of the Parties to the 1987 Montreal Protocol resolved to establish a subsidiary body, the Implementation Committee,⁸⁹ assigned with the task of receiving and considering allegations of breaches of the Protocol made by any Party, and any information or observations submitted by the Secretariat in relation to the preparation of reports based on information furnished by the Parties in pursuance of their reporting obligations. The Committee operates as a dispute settlement *forum* - but without prejudicing the possibility of resorting to traditional means of dispute settlement, with a view to reaching "an amicable resolution of the matter on the basis of respect for the provisions of the Protocol". It eventually reports any findings to the Meeting of the Parties, which has the ultimate authority to decide any measures it deems appropriate to bring about full compliance with the Protocol, including appropriate assistance; issuing cautions; and even suspension of specific rights and privileges under the Protocol, in accordance with relevant international law.⁹⁰

This procedure is illustrative of the emphasis placed on dispute avoidance in international environmental regimes, a task generally, explicitly or implicitly,⁹¹ entrusted to the institutions

⁸⁵ It should, however, be noted that NGOs have throughout this period repeatedly played a significant, albeit informal, role in the actual enforcement of international environmental rules, see Sands, *op.cit.* n.1, pp.158 and 160-3.

⁸⁶ See *ibid.*, pp.150-4.

⁸⁷ See *infra*, Chapter 5, pp.231 *et seq.*

⁸⁸ See, e.g., CITES, Art.XI(3); Geneva Convention, Art.10; Barcelona Convention, Art.14; and Basel Convention, Art.15.

⁸⁹ See Decision II/5, in UNEP, *op.cit.* n.83; and Decision IV/5 and Annexes IV and V, in UNEP, Report of the Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, UNEP/OzL.Pro.4/15, 25 November 1992.

⁹⁰ See *infra*, Chapter 5, p.217-23

⁹¹ An example of explicit attribution of dispute settlement powers is provided in Art.XXIV(2) of the 1982 Jeddah Convention, while a case of *de facto* exercise of dispute settlement functions is the 1985 decision of the Conference of the Parties to CITES on the application of the Convention to species acquired before its entry into force, see Sands, (continued...)

handling - in a co-operative, as opposed to confrontational, spirit - all issues, including conflicts, arising during the operation of the agreements.⁹² Consequently, the attention devoted to dispute settlement clauses in environmental treaties is not great. They typically provide for the use by parties of diplomatic means, mainly negotiations and consultations, to resolve their differences.⁹³ Should the latter reach the level of dispute, and where the foregoing procedures prove abortive, there is also provision for the use of third party diplomatic efforts, i.e. mediation and conciliation.⁹⁴ Judicial settlement, usually in the form of arbitration,⁹⁵ or of resort to the ICJ,⁹⁶ is the last resort for conflict resolution. The Barcelona Convention is one of the instruments providing for arbitration to resolve possible differences which cannot be settled through consultations (Art.28(2) and (3) and Annex A), but this procedure has never been resorted to.

It is not, therefore, surprising that despite the impressive growth of international environmental law, only two disputes with a clear environmental dimension came in front of the ICJ from 1972 to 1992,⁹⁷ both of them, significantly, very early on in this period: The 1973/74 Nuclear Tests Cases,⁹⁸ where the question whether radioactive fallout on the high seas constituted a violation of other states' high seas freedoms was left unresolved, and the acceptance of the concept of an *actio popularis* to protect the commons was resisted, albeit with a strong dissenting minority; and the 1974 Icelandic Fisheries Case, which resulted in an authoritative affirmation of the duty of states to co-operate with a view to conserving fish stocks found in areas beyond national jurisdiction. Still in these instances, no allegation of environmental treaty violation was raised. However, another claim, involving damage to the Canadian territory caused by the crashing of the Soviet satellite Cosmos 954, was fairly expediently and satisfactory settled by means of negotiations, on the basis of the 1972 Space Objects Liability Convention. That incident highlighted once again the suitability of establishing uniform rules on civil liability for environmental damage through international agreements.

⁹¹(...continued)

op.cit. n.1, pp.166-7.

⁹² Although there are instances where a distinct organ or procedure can be summoned to resolve a controversy. For example, under the 1985 South Pacific Nuclear Free Zone Treaty (Art.8 and Annex 4), it is possible to submit complaints with regard to treaty violations to a Consultative Committee, whereas under the Espoo Convention (Art.3(7), disagreement on whether a planned activity will have significant transboundary impact may become the subject of an Inquiry Commission.

⁹³ See, e.g., Barcelona Convention, Art.28(1); MARPOL, Art.10; London Convention, Art.V(2); CITES, Art.XVIII; 1974 Nordic Convention, Art.11; Vienna Convention, Art.11(1).

⁹⁴ See, e.g., LOSC, Art.284 and Annex V, Section 1; 1974 Paris Convention, Art.21; Vienna Convention, Art.11(2), (4), and (5).

⁹⁵ See, e.g., MARPOL, Art.10 and Protocol II; CITES, Art.XVIII; Vienna Convention, Art.11; Basel Convention, Art.20 and Annex VI; 1992 Paris Convention, Art.32(2).

⁹⁶ See, e.g., Basel Convention, Art.20(3); 1992 Helsinki Convention, Art.26(2).

⁹⁷ The Certain Phosphate Lands in Nauru Case, which came before the ICJ in 1992, and where the issue was one of responsibility for rehabilitation of mined lands, was settled out of court in 1993, and consequently the proceedings were discontinued, see Certain Phosphate Lands in Nauru (Nauru v. Australia) Case, 1993 *I.C.J. Reports*, p.322.

⁹⁸ Nuclear Tests Cases (Australia v. France, and New Zealand v. France), (Interim Measures), 1973 *I.C.J. Reports*, p.99; and (Jurisdiction), 1974 *I.C.J. Reports*, p.253.

A discussion of the settlement of environmental disputes cannot be complete without reference to two international courts that have either been playing or have the potential to play an important role in the interpretation and enforcement of international environmental law. These are the European Court of Justice, whose role will be later discussed in more detail, and the International Tribunal for the Law of the Sea and the ordinary and special arbitral tribunals established under the LOSC (Annexes VI, VII and VIII).⁹⁹ Although it is too early in its effective operation to draw any definite conclusions, the latter is likely to become in the future the principal *forum* for the resolution of conflicts related to rights and obligations under the modern law of the sea.

More specifically, pursuant to the LOSC dispute settlement provisions, the primary rule is that of the 'free choice of means' (Art.280). Then, dispute resolution procedures that can be unilaterally initiated and entail binding decisions under other general, regional or bilateral agreements are to be pursued (Art.282). If a dispute is not thus resolved, the Parties are under an obligation to consult (Art.283) and, if they both agree, to submit their case to a fixed conciliation procedure (Art.284). Then comes the possibility of judicial resolution should the above stages prove abortive (Art.286). Parties may - when expressing their consent to be bound - declare that they submit their disputes to one of the listed *fora* (Art.287(1)); a Party which has not made such a declaration is deemed to have accepted Annex VII arbitration (Art.287(3)), whereas the same procedure is applicable if the Parties to a dispute have opted for different procedures (Art.287(5)). The special arbitral procedure according to Annex VIII can deal with disputes concerning environmental protection, and in particular those regarding the exercise by a coastal state of its sovereign rights or jurisdiction allegedly in contravention of international rules and standards on protection and preservation of the marine environment established by the Convention or through a competent international organisation or diplomatic conference (Art.297(1)(c)); the resulting decisions are final and binding (Art.296).

Interestingly, disputes concerning the interpretation and application of other international agreements "related to the purposes of this Convention", thus largely covering all aspects of protection and enhancement of the marine environment, may be submitted to the special arbitral tribunal (Art.288(2)). The 1996 Protocol amending the London Convention in fact acknowledges the relevance of the LOSC dispute settlement arrangements and allows its Parties to choose between an *ad hoc* arbitration and the LOSC system (Art.16). Similarly, the Annex VIII Tribunal has the potential of turning into the competent dispute resolution *forum* for all issues arising in the context of the Barcelona Convention and Protocols, although this possibility has not been explored in the recent revision. That would be an interesting development, but only in abstract terms in view of the

⁹⁹ See A.O.Adede, *The System for Settlement of Disputes under the United Nations Convention on the Law of the Sea*, 1987.

fact that the conflict resolution provisions of the Barcelona regime have never been used in more than twenty years of operation and there is no indication that the situation will change in the future.

All said, it is not until the later years of this phase that compliance control become established as a major concern in the minds and practice of international environmental lawyers and treaty-makers. It is characteristic, in this connection, that the 1981 Montevideo *Ad Hoc* Meeting of Senior Government Officials Expert in Environmental Law, which adopted the Programme for the Development and Periodic Review of Environmental Law,¹⁰⁰ addressed issues of implementation, review and follow-up only in a very general manner, calling for the

“establishment, designation and strengthening of appropriate international machinery to ensure the harmonization and implementation of global and regional rules, standards, recommended practices and procedures and to review the effectiveness of measures taken.”

It also stressed the need for assistance in the development and application of such laws, and encouraged widespread endorsement of environmental assessment mechanisms as means of implementing existing and promoting new environmental legislation.

On the other hand, by 1991, when the Caring for the Earth Strategy was formulated,¹⁰¹ the importance of national and international law implementation and enforcement was fairly appreciated. Thus, the Strategy includes recommendations with a view to establishing comprehensive systems of environmental protection at the national level and providing for their implementation and enforcement; reviewing the adequacy of existing national implementation and enforcement mechanisms; increasing the accountability of the authorities entrusted with implementation and enforcement tasks; granting public rights of access to environmental information, and to environmental impact assessment procedures; and granting NGOs standing in judicial and administrative proceedings to enforce the law.

3.1.4. 1992 and Beyond.

The debate that culminated in the 1992 Rio Conference on Environment and Development (UNCED) brought to the forefront of international attention the concept of sustainable development and the consequent increasing awareness of the need to integrate economic activities with environmental protection. Furthermore, the imperative to develop financial mechanisms of assistance to implement sustainable development strategies was central in the reasoning of the Brundtland Report,¹⁰² which provided the essential background for the Rio Conference.

At the 1992 Rio Conference, the centrality of financial resources devoted to the environment was reiterated; in fact, that was the single most controversial issue in the Conference's

¹⁰⁰ See UNEP/GC.10/5/Add.2, 1981, Annex, Chapter II.

¹⁰¹ IUCN/UNEP/WWF, *Caring for the Earth: Strategy for Sustainable Living*, 1991.

¹⁰² WCED, *Our Common Future*, 1987.

agenda.¹⁰³ Principle 7 of the Rio Declaration establishes, albeit in a 'soft' form, the primary responsibility of developed states in providing the resources to pursue global sustainable development. It is illustrative of the absolute importance of financing in the context of implementation of environmental obligations that Section IV of Agenda 21, which lays down the 'means of implementation' of the sustainable development strategies, devotes its major part to the 'new and additional' financial resources and mechanisms (Chapter 33) that need to be devised and developed, and to other closely related issues, such as transfer of technology, co-operation and capacity building, scientific research and data gathering, and environmental education and training. This logically includes a respective increased burden with regard to implementation of international standards of environmental protection and conservation, a conclusion actually well-reflected in Chapter 39, as well as in the two global instruments adopted at Rio, the Climate Change and Biodiversity Conventions.

Both these instruments build on the precedent of the ozone regime and require developed states to transfer technology and provide 'new and additional' financial resources, so that developing states can meet the 'agreed full incremental costs' of complying with their conventional obligations;¹⁰⁴ they even go further by explicitly conditioning implementation of developing countries' obligations - including that of reporting - on fulfilment of developed countries' financial commitments.¹⁰⁵ However, they do not follow the ozone pattern of establishing a separate financial mechanism and opt to rely instead on the effective operation of the Global Environment Facility (GEF).

GEF, a notable product of the reorientation of World Bank activities,¹⁰⁶ was indeed defined as the *interim* financial mechanism for Agenda 21, as well as for the Climate Change and the Biodiversity Conventions. Established in 1990 as a pilot programme,¹⁰⁷ and restructured - through a cumbersome and highly controversial process -¹⁰⁸ in 1994 with a view at universal membership and greater transparency and participation, it consists of the 'core' Global Environment Trust Fund (GET), related co-financing arrangements, and the Ozone Projects Trust Fund (OTF). GEF aims at assisting in the protection of the global environment and the promotion of environmentally sound and sustainable economic development in developing countries in need of additional and concessional international financing to achieve these objectives. It is designed to provide grants, or

¹⁰³ See H.Sjöberg, 'The Global Environment Facility', in J.Werksman (ed.), *op.cit.* n.75, pp.153-5.

¹⁰⁴ See, among others, A.Jordan & J.Werksman, 'Additional Funds, Incremental Costs and the Global Environment', 3(2/3) *R.E.C.I.E.L.*, 1994, pp.81-7.

¹⁰⁵ Climate Change Convention, Art.4(3),(5), and especially (7), 11 and 12(5); Biodiversity Convention, Art.20, especially at (4), and 21.

¹⁰⁶ See, among others, Sjöberg, *op.cit.* n.103, pp.148-62; Shihata, *op.cit.* n.76, pp.168-73; Sand, *op.cit.* n.76, pp.17-9; and Sands, *op.cit.* n.1, pp.736-41. The Bank serves as trustee for the fund, as well as implementing agency together with UNDP and UNEP.

¹⁰⁷ See Sjöberg, *op.cit.* n.103, pp.150-3. In its pilot phase, the GEF committed 115 grants totalling \$735 million, see World Bank, *op.cit.* n.76, p.66. The restructured GEF is capitalised at \$2 billion.

¹⁰⁸ For a detailed account, see Sjöberg, *op.cit.* n.103, pp.153-8.

arrange concessional loans to developing countries, to be used in four areas of priority, namely protection of the ozone layer; limiting emissions of greenhouse gases; protection of ecosystems and biodiversity; and protection of international waters from industrial, wastewater and hazardous waste pollution (10-20% of the total allocations). GEF also provides funding to NGOs through a small-grants programme.¹⁰⁹

Financial mechanisms of assistance aside, implementation, enforcement and dispute settlement issues also occupy a prominent position in Agenda 21, Chapter 39, where the desired future course of action in relation to international legal instruments and mechanisms is outlined. It is specifically stated that some of the primary objectives of the review and development of international environmental law should be:

- To identify and address difficulties which prevent some States, in particular developing countries, from duly implementing international agreements or instruments and, where appropriate, to review or revise them with the purpose of laying down a sound basis for the implementation of these agreements or instruments;
- To promote and support the effective participation of all countries concerned, and in particular developing ones, in the negotiation, implementation, review and governance of international agreements, including appropriate provision of financial assistance and other available mechanisms for that purpose, as well as the use of differential obligations where appropriate. To this effect, developing countries should be given 'headstart' support, such as assistance in building up expertise in international environmental law, and in assuring access to the necessary information and scientific/technical expertise;
- To ensure the effective, full and prompt implementation of legally binding instruments, and to facilitate their timely review and adjustment. To this effect, the parties to international agreements, with the contribution of international bodies such as UNEP, should consider establishment and development of appropriate procedures and mechanisms, for example efficient and practical reporting systems;
- To improve the effectiveness of institutions, mechanisms and procedures for the administration of agreements; and
- To study and consider the broadening and strengthening of the capacity and range of mechanisms, *inter alia* of the UN system, to facilitate the identification, avoidance and settlement of international disputes in the field of sustainable development, taking into account existing bilateral and multilateral agreements for the settlement of such disputes. This may include mechanisms and procedures for the exchange of data and information, notification and consultation regarding situations that might lead to disputes, and for effective peaceful means of dispute

¹⁰⁹ See D.Reed, 'The Global Environment Facility and Non-Governmental Organizations', 9 *American Univ.J.Int'l L. & Pol'y*, 1993, pp.191-213.

settlement in accordance with the UN Charter, including recourse to the ICJ, and their inclusion in sustainable development treaties.

In relation specifically to 'implementation mechanisms' of international conventions (Chapter 39.7), Agenda 21 goes on to stress that:

" The parties to international agreements should consider procedures and mechanisms to promote and review effective, full and prompt implementation. To that effect, States could, *inter alia*:

(a) Establish efficient and practical reporting systems on the effective, full and prompt implementation of international legal instruments;

(b) Consider appropriate ways in which relevant international bodies, such as UNEP, might contribute towards the further development of such mechanisms."

The Rio Declaration is also significant in its approach to the process of implementation of international norms. In Principle 10, it calls for individual access to publicly held environmental information, as well as for public participation in decision-making processes. It also promotes effective access of individuals to judicial and administrative proceedings at the national level as a means to enforce environmental law. Hence, domestic enforcement procedures become a central concern of the international community; while, at the same time, international law on liability is once again pinpointed as an area where development is desirable (Principle 13).

Relevant references are also made in Chapter 17 which lays down the strategy for, among others, marine environmental protection. Here, emphasis is put on ensuring prior assessment of any activity that may have adverse impacts upon the marine environment, and on taking action to ensure compliance with generally accepted regulation regarding pollution caused by ships.

The revised Montevideo Programme, finalised in 1992 and endorsed by UNEP in 1993,¹¹⁰ reflects this shift of emphasis to procedural and institutional matters for the future development of international environmental law: Programmes A to G aim at enhancing the capacity of states to participate in the development and implementation of environmental law; promoting the effective implementation of international legal instruments; and assessing the adequacy of existing ones; developing further mechanisms to facilitate the avoidance and settlement of disputes; developing and implementing legal and administrative mechanisms for the prevention and redress of pollution and other environmental damage; promoting widespread use of environmental impact assessment; and promoting public awareness and education, provision of information, and public participation.

This trend is slowly consolidated in later years, especially in the Western world, through adoption of a series of instruments, such as the Community Directive 90/313 on public access to environmental information, the 1993 NAFTA side-Agreement on Environmental Co-operation, and the 1998 ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention). As will be argued in Chapter 9,

¹¹⁰ See UNEP/GC.17/5, 1993.

this is one of the most promising areas of development of international regulation that could have some tangible impact in more vigorous compliance control in the future.

More generally, in the first years of the new phase of international environmental law-making that begins at Rio, especially in the newly established climate change and biodiversity regimes, the main modern compliance-inducing elements are present. Besides financial mechanisms discussed above, the respective Conventions also include extensive reporting requirements,¹¹¹ and the usual provision of power to the Conference of the Parties to assess implementation of the Convention and adopt regular relevant reports.¹¹² Dispute settlement clauses make provision for possible compulsory resort to arbitration or the ICJ, and compulsory establishment of a conciliation commission.¹¹³

These provisions aside, however, there is a conspicuous absence of any reference to compliance, or rather non-compliance, issues, or to national or international enforcement obligations. In fact, under the Climate Change Convention (Art.10), a Subsidiary Body for Implementation is to consider national reports and assist the Conference in its task of implementation review, and there is the additional possibility of establishing a 'multilateral consultative process', available to the Parties on request, to resolve implementation questions (Art.13). But it is indicative of the suspicion with which the states involved view compliance control that this euphemism is used to describe what is actually turning out to be a 'non-compliance procedure'.¹¹⁴

On the other hand, there is at least one instance of duplicating the ozone non-compliance procedure, in the transboundary air pollution regime. In 1994, an Implementation Committee with functions similar to these of the Montreal Protocol Implementation Committee was set up under the Protocol to the 1979 Geneva Convention on Further Reduction of Sulphur Emissions (1994 Sulphur Protocol, Art.7).¹¹⁵ The 1992 Paris Convention on the Protection of the Marine Environment of the North-East Atlantic is also significant in that it attempts to lay down in terms more explicit than usual - and using a language that greatly contrasts with that of the new global conventions - the compliance-related powers of the Commission. Under Article 23, the Commission has to assess the compliance records of the Parties on the basis of their periodic reports, and

"when appropriate, decide upon and call for steps to bring about full compliance with the Convention, and decisions adopted thereunder, and promote the implementation of recommendations, including measures to assist a Contracting Party to carry out its obligations."

¹¹¹ Climate Change Convention, Art.12; Biodiversity Convention, Art.26.

¹¹² Climate Change Convention, Art.7; Biodiversity Convention, Art.23(4).

¹¹³ Climate Change Convention, Art.14; Biodiversity Convention, Art.27 and Annex II.

¹¹⁴ On the efforts to establish such a mechanism, see *infra*, Chapter 5, at fn.190.

¹¹⁵ See *ibid*, at fn.184.

As will be later discussed, this formulation is closely followed in the new Article 27 of the revised Barcelona Convention.¹¹⁶

One could, hence, tentatively assume at that stage that the new regimes of environmental protection will gradually come to fully conform with that prominent trend, especially as the substantive obligations undertaken will become more specific and thus susceptible to concrete legal control and enforcement. This assumption is supported by some recent statements, namely the Observations and Recommendations regarding the Programme for the development and periodic review of environmental law in the 1990s, which assert the "overriding importance" of further improving reporting and data-collection systems, and developing compliance regimes and procedures to "help and encourage states to fulfil their obligations under multilateral environmental agreements by simple, co-operative, non-judicial and transparent means";¹¹⁷ and the Programme for the further implementation of Agenda 21, adopted by the UN General Assembly at a Special Session in June 1997, which follows an almost identical wording.¹¹⁸

Finally, it should be noted, that in 1992, another significant development took place, i.e. the inclusion of ecological concerns in the security agenda of the UN Security Council,¹¹⁹ followed by the establishment of a Chamber for Environmental Matters by the ICJ, in July 1993.¹²⁰ These events point to the possibility that in the future major environmental conflicts might be resolved through the UN enforcement and dispute settlement machinery used to tackle issues threatening global peace and security. For the time being, however, the protracted - since 1977 - history of the controversy between Hungary and Slovakia regarding the Gabčíkovo-Nagymaros dam suggests that the settlement of a complicated dispute with environmental aspects might entail the use of a great variety of enforcement and dispute settlement techniques, including unilateral reference to the ICJ, negotiation, arbitration, conciliation by the EC Commission, resort to the emergency procedures of the Conference on Security and Co-operation in Europe (CSCE), and finally submission of the difference to the ICJ agreed by the two parties.¹²¹ Hence, formal dispute settlement mechanisms are today more flexible,¹²² in the sense that there are several options available, but still cumbersome and uncertain.

¹¹⁶ See *ibid.*, p.216.

¹¹⁷ See UNEP, Meeting of Senior Government Officials Expert in Environmental Law for the Mid-term review of the Programme for the development and periodic review of environmental law in the 1990s, Observations and Recommendations regarding the Programme for the development and periodic review of environmental law in the 1990s, UNEP/ENV.LAW/3/3, 1996, at B.7 and 8.

¹¹⁸ See UN Doc.A/S-19/29, 27 June 1997, Annex, at para.110.

¹¹⁹ See Note by the President of the Security Council on the responsibility of the Security Council in the maintenance of international peace and security, UN Doc. S23500, 31 January 1992, p.2, cited in Sands, *op.cit.* n.1, p.141.

¹²⁰ Which, however, has never had a dispute brought before it as yet, and, some argue, may never do, see P.Sands, 'International Environmental Litigation and its Future', 32 *Univ. of Richmond L.Rev.*, 1999, p.1638.

¹²¹ See Sands, *op.cit.* n.1, pp.142 and 351-4.

¹²² See also B.Conforti, *International Law and the Role of Domestic Legal Systems*, 1993, pp.5-7, arguing that judicial decision-making, including all forms of dispute settlement is on the decline giving way to alternative dispute resolution techniques.

3.2. A Review of Different Approaches to Compliance Control.

In the previous Section we outlined the evolution of international compliance-control mechanisms from the early bilateral state responsibility/sanctions model, which was eventually broadened to accommodate community interests entailed in multilateral treaty regimes, where violation of international standards often does not involve direct injury to other states, to *ad hoc* follow-up procedures collectively administered by international organs coupled with attribution of standing to those actually affected by any given violation. In the specific field of international environmental law, we traced the progress from piece-meal rules, mainly dealing with shipping activities combined with some minimum civil liability standards, to a wholesome system of principles and comprehensive regulation of a wide range of polluting activities, irrespective of their transboundary effects. This in turn led to increased attention to issues of implementation at the national level, and to the proliferation of institutional arrangements setting up permanent bodies to review implementation of international law by means of regular reports submitted by the parties. We also noted the focus lately placed on more streamlined compliance-control mechanisms; on financial and technical assistance to induce application of international standards in individual states; and, lastly, on procedural requirements, especially in relation to prior environmental impact assessments, access to environmental information, and to judicial and administrative proceedings, that are to operate at the domestic level and have become an essential international concern in the post-Rio era.

Before we attempt to systematise the different approaches to compliance control as they have developed and make some initial points on their relevance for enhanced implementation of international environmental standards for the protection of the Mediterranean Sea, let us review the basic characteristics that a compliance-control system must have in order to meet today's needs, according to existing literature.

3.2.1. General Considerations.

In the Introduction reference was made to the merits of the 'managerial approach' to control compliance with international environmental undertakings.¹²³ The tasks of managing compliance are threefold: reviewing and assessing the performance of parties to a treaty in order to identify problems with the regime itself and cases of non-compliance; ensuring that appropriate responses

¹²³ See A.Chayes & A.Handler Chayes, *The New Sovereignty - Compliance with International Regulatory Agreements*, 1995, especially at Part II: Toward a Strategy for Managing Compliance; D.G.Victor, K.Raustiala. & E.B.Skolnikoff (eds.), *The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice*, 1998, pp.681-4; and A.Chayes, A.Handler Chayes & R.B.Mitchell, 'Managing Compliance: A Comparative Perspective' in E.Brown Weiss & H.K.Jacobson (eds.), *Engaging Countries - Strengthening Compliance with International Environmental Accords*, 1998, pp.41 *et seq.*; and *supra*, Introduction, pp.22-3. For a review of current literature, see J.Werksman, 'Compliance and the Kyoto Protocol: Building a Backbone into a "Flexible" Regime', 9 *YB.I.E.L.*, 1998, pp.56-8.

to non-compliance are put in operation; and adjusting the rules to improve performance.¹²⁴ Thus, treaty compliance systems can be systematically divided into three parts: the primary rules system, the compliance-information system, and the non-compliance response system.¹²⁵ With regard to the primary rules system, it has been noted that "some rules work better than others" and that the choice of who is regulated and how "sets the bounds on how many actors will comply voluntarily and the efforts needed to get others to comply".¹²⁶ It follows that "the selection of primary rules may prove the most powerful lever international policy-makers have over the level of compliance".¹²⁷

According to this line of reasoning, vague and ambiguous treaty language makes undisputable non-compliance a rare case, in view of the fact that there is no international body that would authoritatively interpret them.¹²⁸ On the contrary, clear and precise obligations are more likely to be complied with.¹²⁹ Another consideration in favour of concrete international rules, as akin as possible to national legislation, is that this kind of international law does not require further elaboration by the national legislator, a feature characterising Community Regulations. This would mean that ratification would be enough to make them part of the specific set of rules governing their subject-matter within a state,¹³⁰ and the issue of what formal steps a government must take to implement international law would lose many of its complications.¹³¹ A related technique that has been proposed introduces detailed schedules of performance as part of the substantive set of obligations, so that the parties are asked to take small steps at a time, while each subsequent step is conditioned on all other parties having done what they had promised to do.¹³²

Moreover, international law regulating activities that are 'visible', basically involving a small number of actors, is more likely to be complied with,¹³³ as the example of regulating production instead of consumption of ozone-depleting substances demonstrates. A related approach that seems especially promising in the environmental sphere recommends the introduction of what Mitchell describes as 'premonitory' control measures,¹³⁴ better known to international lawyers as the various expressions of the preventative approach to regulation. This will often entail restricting

¹²⁴ Chayes, Handler Chayes & Mitchell, *op.cit.* n.123, pp.49 *et seq.*

¹²⁵ See R.B.Mitchell, *Intentional Oil Pollution at Sea - Environmental Policy and Treaty Compliance*, 1994, pp.52-65.

¹²⁶ *Ibid.*, pp.3 and 53.

¹²⁷ *Ibid.*, p.55, and see pp.312-8 for some recommendations on how to make the best choice of the primary rule system.

¹²⁸ *Ibid.*, pp.33-4.

¹²⁹ See E.Brown Weiss & H.Jacobson, 'Assessing the Record and Designing Strategies to Engage Countries', in Brown Weiss & Jacobson (eds.), *op.cit.* n.123, pp.523-5.

¹³⁰ Kiss and Shelton note that environmental treaties commonly lay down a framework of international rules which requires supplementing or completion through internal legislation, what is sometimes referred as 'non-self-executing' treaties; nevertheless, the nature of each provision must be assessed in its own merit, as there are often clauses capable of immediate implementation in the national legal system, *op.cit.* n.1, p.98; and *infra*, Chapter 7, pp.309-10.

¹³¹ See Sands, *op.cit.* n.1, pp.143-48

¹³² See L.E.Susskind, *Environmental Diplomacy - Negotiating More Effective Global Agreements*, 1994, p.119.

¹³³ Mitchell, *op.cit.* n.125, pp.55-6; and Brown Weiss & Jacobson, *op.cit.* n.129, pp.521-3.

¹³⁴ See Mitchell, *op.cit.* n.125, pp.63-4.

the most 'transparent' activity that might not be environmentally harmful itself but which will make harmful activities impossible, for example, through the obligation to install catalytic converters on automobiles at the stage of manufacturing, or the duty to increase clean energy production.

With regard to vessel-source pollution, for instance, there has been an increasing level of compliance with and enforceability of international standards, as the law evolved from the largely ineffective OILPOL,¹³⁵ to the well-respected MARPOL. This is explained by Mitchell on the basis of compliance-inducing choice of primary rules: When tanker operators proved unwilling to abide to discharge prohibitions, international law imposed on shipowners the burden to construct and equip their tankers in ways that essentially prevent oil discharges.¹³⁶ The history of dumping regulation, which is basically the only other source of marine pollution that international law has constrained with substantive rules for a considerable amount of time, supports the above assumptions. A transparent system of explicit authorisations in order to undertake dumping activities, and an incremental tightening up of the law, recently reaching the clarity of total prohibition, have helped mitigate the problem.

It is obvious that designing primary rules according to the above standards has the added advantages of discouraging deviating behaviour, of making violations easily detectable and sanctions and remedies *quasi* automatic. Its main weakness is also obvious: It is less likely that states will consent to such 'sharp' international commitments. The qualifications very often encountered in the text of the revised Barcelona Convention and Protocols are evidence to that.

With regard to compliance-information systems, transparency - referring both to the amount and quality of the information collected and the degree of analysis and dissemination of this information - is considered a key factor.¹³⁷ This element can be enhanced by making rewards for compliance dependent on governments supplying such information or allowing inspections; by increasing information flow between parties; by reducing the costs or, reversely, increasing resources dedicated to monitoring; by financing the development of improved verification technologies; by providing permanent *fora* to analyse the data gathered and to inquire further into actions - or inactions - and the reasons behind them; and by expanding the number and variety of actors authorised to collect, analyse and disseminate information.¹³⁸

The relevant experience with marine pollution from ships and dumping, as well as that in the context of MAP, is characterised, on one hand, by improvements in monitoring and verification

¹³⁵ See P.S.Dempsey, 'Compliance and Enforcement in International Law - Oil Pollution of the Marine Environment by Ocean Vessels', 6 *NW J. of Int'l L. & Bus.*, 1984, pp.459-561.

¹³⁶ See Mitchell, *op.cit.* n.125, especially Chapters 7 and 8.

¹³⁷ See *ibid*, pp.57-8; and A.Chayes & A.Handler Chayes, 'Compliance Without Enforcement: State Behaviour under Regulatory Treaties', 7 *Negotiation J.*, 1991, p.321.

¹³⁸ Mitchell, *op.cit.* n.125, pp.58-9 and pp.318-22 on recommendations regarding the design of a more effective compliance information system.

techniques, but, on the other, by largely ineffective reporting systems.¹³⁹ Only in the context of the 1982 Paris Memorandum of Understanding on Port State Control, has the reliability and efficiency of information-gathering and detection of violations shown considerable progress,¹⁴⁰ but this arrangement cannot be duplicated in other regulatory areas as will be explained in Chapter 6.

Turning to the non-compliance response system, one cannot help remarking that what Professor Kiss considers a notable feature of the Barcelona Convention system, namely that there are no provisions for individual benefits that a Party can derive while, on the other hand, there is a series of unilateral obligations that everybody assumes,¹⁴¹ is actually a major weakness. Providing positive inducements or incentives, i.e. benefits in the form of money payments or other goods that are legally contingent upon compliance with the treaty and administered through treaty-defined procedures,¹⁴² mainly education in the broadest sense,¹⁴³ financial and technology transfers, and market-based incentives - or disincentives, such as tradeable emission permits and taxes, increases the likelihood of compliance by public and private actors that will seek to explore these rewards.

A shortcoming of the inducement strategy is that, while it involves great costs, it is dispersed indiscriminately to all participants in an environmental regime, and thus is unnecessarily directed to actors that would have complied anyway.¹⁴⁴ An idea that seems to be taking this flaw into account is the posting of bonds upon signing of an international environmental agreement, that would be paid back upon performance or sacrificed in the case of non-compliance.¹⁴⁵

From an opposite perspective, explicit attribution of enforcement powers in the event of treaty violations, or, to put it differently, removal of "the international legal barriers... that constrain those countries with incentives to enforce",¹⁴⁶ as well as 'privatisation' of the benefits and costs of enforcement activity are also thought to be factors working in favour of some concrete response that would deter violations and punish offenders. An example of such 'removal of legal barriers' is provided by the universal port state jurisdiction as enunciated in the LOSC, while 'privatisation' of the enforcement activity is achieved through the introduction of EEZs, both relating to control of shipping activities.¹⁴⁷

The contradistinction with developments in the area of land-based pollution - on which the success of any meaningful effort at mitigating marine degradation largely depends - is

¹³⁹ See *ibid*, Chapter 4, with regard to reporting under IMO instruments; and *infra*, Chapter 5, pp.200-9.

¹⁴⁰ See Mitchell, *op.cit* n.125, pp.135 *et seq.*; and *infra*, Chapter 5, pp.212-7.

¹⁴¹ See A.Kiss, 'Un Modèle Méditerranéen de Protection des Mers Régionales', in J.-Y Cherot and A.Roux (eds.), *Droit Méditerranéen de l'Environnement*, 1988, pp.159-60.

¹⁴² Chayes & Chayes, *op.cit.* n.137, p.318.

¹⁴³ See Mitchell, *op.cit.* n.125, pp.46-7 and 59-63.

¹⁴⁴ See *ibid*, p.60.

¹⁴⁵ See Susskind, *op.cit.* n.132, pp.117-8.

¹⁴⁶ Mitchell, *op.cit.* n.125, pp.62 and 323-4.

¹⁴⁷ See *infra*, Chapter 7, pp.296-7.

overwhelming. It is true that the development of techniques similar to those described above in this field face considerable restrictions. These mainly stem from the fact that these techniques cannot deal with pollution occurring exclusively within a single jurisdiction, where the polluting activity is also carried out; in other words, when there is no transnational element. This is true even in cases of transfrontier land-based pollution, since the polluter is usually outside the jurisdiction of other states. Other factors making such techniques inapplicable are that land-based pollution standards are not usually unified minimum requirements as is the case with standards applicable to ships; that international regimes with regard to land-based pollution are general grounded in the common interest in the quality of the marine environment rather than in the protection of the interests of individual states; and that the relevant obligations are rather promotive than prohibitive.¹⁴⁸

An approach that seems more promising is the attribution of enforcement powers to international institutions, such as those granted to the European Commission or the International Sea-bed Authority, and to NGOs and individuals, which are likely to be used in a constructive manner.¹⁴⁹ Public pressure at the permanent organs of a treaty regime, from national and international NGOs and the media are thought to become increasingly effective,¹⁵⁰ but are largely left unaccommodated by formal legal arrangements. Even the review of compliance records assigned to the Meetings of the Parties is a highly politicised process, despite its inclusion - in these or similar terms - in almost all modern environmental agreements. The issue, then, is how to formalise these processes in a way that would give them some legal predictability and certainty. Relevant suggestions focus on establishing one or more international authorities with rigorous inspection and enforcement powers;¹⁵¹ the inclusion of environmental matters in the international security agenda;¹⁵² the creation of official citizen complaints channels; allowing international standing for individuals; developing the notion of a 'right to a clean and healthy environment' as a human right with the concomitant procedural rights, such as access to information and to judicial and administrative proceedings, and participation in environmental impact assessments and other levels of decision-making;¹⁵³ or even establishing a 'Green Amnesty International'.¹⁵⁴

¹⁴⁸ See Q.Meng, *Land-Based Sources of Marine Pollution*, 1987, pp.233-5.

¹⁴⁹ See Sands, *op.cit.* n.1, pp.160-3.

¹⁵⁰ See, for example, Mitchell, *op.cit.* n.125, pp.61-2; O.Young, *Compliance and Public Authority*, 1979, pp.22 and 44.

¹⁵¹ See K.Sachariew, 'Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms', 2 *Y.B.I.E.L.*, pp.51-2; and G.H.Brutland, 'The Road from Rio', 96 *Technology Rev.*, 1993, p.63, on such an authority with regard to carbon dioxide emission targets.

¹⁵² See A.Timoshenko, 'Ecological Security: Global Change Paradigm', 2 *Colo.J. of Env'l & Int'l L. & Pol.*, 1990, p.127; and P.Sands, 'Enforcing Environmental Security: The Challenge of Compliance with International Obligations', 46(2) *J. of Int'l Aff.*, 1993, pp.382-7.

¹⁵³ See Susskind, *op.cit.* n.132, p.114, where it is suggested that all UN members sign a protocol equivalent to the Optional Protocol to the International Covenant on Civil and Political Rights.

¹⁵⁴ See *ibid.*, pp.114-7.

It must, finally, be noted that a treaty regime in operation has other repercussions as well that correlate to the dimension of time and are significant for present purposes. As Mitchell aptly summarises, "treaty institutions facilitate the creation of new information and knowledge and thereby change perceived interests".¹⁵⁵ New knowledge makes compliance more likely because it brings the high costs of environmental degradation to light. Treaty operation also encourages "a process of social learning by which governments and other actors come to alter their values and objective functions".¹⁵⁶ Involvement in regular discussions in itself increases the understanding and perceived importance of the issue. Peter Haas has even argued that developing and disseminating information on Mediterranean marine pollution through MAP, and helping place the 'epistemic community' of the region in domestic policy positions has been the main factor explaining diverse or increasing levels of compliance with treaty rules regulating Mediterranean pollution.¹⁵⁷

Two central presuppositions related to the points made above guide the subsequent assessment of compliance-control mechanisms. First, that any meaningful analysis of compliance with international environmental law has to deal with both state and private actors, since the ultimate target of regulation, in the environmental sphere, is more often individual than government behaviour. This is because even when international commands are directly addressed to states, these commonly involve public control or regulation of private activities, land-based pollution regulations being a primary example.¹⁵⁸ Now, if the most formidable obstacles to establishing more stringent methods and rules to deal with state non-compliance lie in "the abiding constraints of the state system" itself, the persisting value of sovereignty and the fact that "in a decentralised legal system, no obligation can be imposed without consent and that states continue to be extremely resistant to the creation of any coercive mechanisms for enforcement",¹⁵⁹ the central problem with directly addressing private compliance is that only recently have individuals started to be acknowledged as legitimate actors in international law interactions, and consequently there are very few relevant legal institutions or concepts that one can build upon. At the same time, however, this open-endedness provides an opportunity to devise methods to circumvent the inadequacies of the state-centred approach. From an opposite point of view, private actors are equally, if not more, important in the role of enforcers of international environmental standards, because it is exactly the constituency of concerned citizens and their associations that have an interest to see that environmental protection rules are abided with.

¹⁵⁵ Mitchell, *op.cit.* n.125 p.64.

¹⁵⁶ *Ibid*, p.65.

¹⁵⁷ See P.Haas, *Saving the Mediterranean - The Politics of International Environmental Co-operation*, 1990. Chayes and Chayes take this idea still further by contending that inertia towards compliance is even generated with time among national bureaucracies, *op.cit.* n.137, pp.325-7.

¹⁵⁸ See Mitchell, *op.cit.* n.125, pp.53 and 307-9; and Chayes & Chayes, *op.cit.* n.137, p.318.

¹⁵⁹ A.Hurrell and B.Kingsbury, 'The International Politics of the Environment: An Introduction', in A.Hurrell and B.Kingsbury (eds.), *The International Politics of the Environment*, 1992, pp.22-3.

Secondly, all efforts at analysing the factors that enhance treaty-related compliance can be efficiently summarised in what has been branded “the strategic triangle of compliance” consisting of incentive, ability, and authority.¹⁶⁰ In other words, when considering ways to bring about greater respect for international environmental norms, one should seek to find or create actors with adequate incentives, practical ability, and legal authority to implement and enforce these rules.

3.2.2. State Responsibility/Sanctions and Civil Liability.

As has been made apparent from the preceding account, the state responsibility model of control over compliance with international obligations is the most traditional of all possible approaches. There has been extensive literature on the limitations of state responsibility, as it has evolved so far, and on its marginal value and scope of application as a means of enforcing environmental obligations.¹⁶¹ Chapter 5 will discuss its failings in greater detail; suffice it here to say that the basic inadequacies of this mechanism are inherent: It reacts *ex post* to infringements of international law, as opposed to preventing them; it brings directly under scrutiny only state violations and requires an ‘injured state’ that would be willing to challenge a breach of international law and initiate the cumbersome procedure of international dispute settlement. More importantly, it is “inherently bilateral and confrontational in character”.¹⁶² To put it bluntly, state responsibility is an age-old notion that cannot be adapted to the needs of modern international environmental law unless it radically changes its fundamental tenets. Hence, it is not surprising that it has never been invoked in the context of the Mediterranean regional regime for the protection of the marine environment, nor in many other contexts for that matter, and that the efforts at developing the notion to address infringements of environmental obligations in particular have been as yet abortive.¹⁶³

Indeed, modern environmental law requires a preventative approach to ensuring compliance, a community response to non-compliance with obligations to protect the global commons, and preventative remedies. Judicial tribunals are thought to be ill-equipped to provide solutions taking these considerations into account; negotiations, and especially in an informal setting, are preferred because they allow for flexible and equitable solutions, not necessarily dictated or contemplated by international law as it stands, but accommodating all interests.¹⁶⁴

¹⁶⁰ See Mitchell, *op.cit.* n.125, especially at pp.305-7.

¹⁶¹ See, among others, A.Kiss, ‘Present Limits to the Enforcement of State Responsibility for Environmental Damage’, in F.Francioni & T.Scovazzi (eds.), *International Responsibility for Environmental Harm*, 1991, pp.3-14; M.Spinedi, ‘Les Conséquences Juridiques d’un Fait Internationalement Illicite Causant un Dommage à l’Environnement’, in *ibid.*, pp.75-124; A.E.Boyle, ‘State Responsibility for Breach of Obligations to Protect the Global Environment’, in W.E.Butler (ed.), *Control over Compliance with International Law*, 1991, pp.69-80; M.Koskenniemi, ‘Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol’, 3 *Y.B.I.E.L.*, 1992, pp.125-8; and J.Brunnée, ‘The Responsibility of States for Environmental Harm in a Multinational Context - Problems and Trends’, 34 *C. de D.*, 1993, pp.827-45.

¹⁶² Birnie & Boyle, *op.cit.* n.11, p.136.

¹⁶³ See *infra*, Chapter 4.

¹⁶⁴ See Birnie & Boyle, *op.cit.* n.11, p.137.

The exceptional pattern of near-compulsory adjudication adopted in the LOSC is in this context arguably justified by the 'package deal' nature of a Convention primarily concerned with allocation and control of legal power,¹⁶⁵ whereas in most environmental regimes the purpose is one of facilitating co-operative solutions to common problems, making institutional supervision a more appropriate means of control and development.

On the other hand, the threat or use of sanctions, in a treaty framework or under general international law, which is an equally traditional remedy for non-compliance, has proved somewhat more flexible, so that variations of this approach linking environmental compliance to other issues, for instance trade or other economic activities, or threatening withdrawal of membership privileges are increasingly finding their place in international environmental regimes,¹⁶⁶ but, importantly, only in the broader framework of a more modern international enforcement mechanism, such as the ones examined below.

International civil liability schemes present rather different characteristics: With this device international law aims at harmonising civil liability laws in individual countries, thus targeting private parties as opposed to states, and at giving standing to the victims of pollution to claim reparation for environmental damage through national courts. Despite its potentially preventive function, and the internalisation of costs and application of the polluter pays principle it achieves,¹⁶⁷ this model presents its own important limitations. The basic limitation relates to the nature of civil liability which is not a system of control over compliance with international/national standards proper. Moreover, it too provides an *ex post* response; it applies mainly to transboundary damage; and, as it stands today, a substantial part of environmental damage goes uncompensated.¹⁶⁸

In order to enhance its deterrent effect so as to make it more relevant to compliance control the last two characteristics need to be altered. In this connection, there is currently a tendency to abandon the notion of transboundary damage and address liability for environmental harm within national borders, which, together with the recent emergence of attitudes which favour compensation for pure environmental loss and the development of relevant techniques within national legal systems, points to a potential fruitful turning point for international regulation of liability issues.¹⁶⁹

¹⁶⁵ According to Birnie & Boyle, *ibid.*, p.182.

¹⁶⁶ See Brown Weiss & Jacobson, *op.cit.* n.129, pp.547-8; and *infra*, Chapter 4, pp.150-3.

¹⁶⁷ See *infra*, Chapter 4, pp.153-4.

¹⁶⁸ See *ibid.*, p.167-74.

¹⁶⁹ See *ibid.*, pp.174-8.

3.2.3. The 'Comprehensive Institutional Approach'.¹⁷⁰

In recent years, international environmental lawyers have given much attention to the emergence and workings of the institutional structures operating in environmental treaty regimes. These structures provide permanent, flexible, non-confrontational and formalised *fora*, where conventional sets of rules can be continuously refined and complemented, and where procedures to supervise implementation and to address relevant difficulties or even non-compliant behaviour, can be developed. In other words, they can accommodate all three aspects of the treaty-compliance system, as described above.

Chayes and Chayes have distinguished between an 'enforcement model' of compliance and a co-operative 'managerial model', the latter being suited in today's conditions.¹⁷¹ They, in fact, suggest that "the fundamental instrument for maintaining compliance with treaties at an acceptable level is an iterative process of discourse among the parties, the treaty organization, and the wider public",¹⁷² what Professor Brown Weiss labels "the sunshine strategy".¹⁷³ This approach relies heavily on ongoing bargaining,¹⁷⁴ publicity and community pressure to enhance respect for the law,¹⁷⁵ in acknowledgement of the reality that consensus-building through negotiation is and will continue to be the principal method of dealing with compliance problems.¹⁷⁶ In addition, it fits in well with the developing theory of 'trust',¹⁷⁷ whereby states are seen as caretakers, 'trustees' of their environment rather than sovereigns thereupon.¹⁷⁸ Hence, formal mechanisms of legal settlement - diplomatic or judicial - are undermined, as the judicial function, i.e. interpretation of the legal norms, response to non-compliance, and settlement of disputes, is internalised.¹⁷⁹

As it inexorably links law-making with compliance, this model could be said to by-pass the problem of international enforcement and instead of pinpointing violators of international rules as the latter stand and take appropriate corrective action, either in the form of sanctions or assistance, it rather adapts, interprets and changes the rules themselves. This is by no means said by way of

¹⁷⁰ For a discussion of the merits and limitations of the 'institutional' approach, see, among others, A.E.Boyle, 'Saving the World? Implementation and Enforcement of International Environmental Law through International Institutions', 3(2) *J. of Env't L.*, 1991, pp.229-45; T.Gehring, 'International Environmental Regimes: Dynamic Sectoral Legal Systems', 1 *Y.B.I.E.L.*, pp.35-56; and Kiss & Shelton, *op.cit.* n.1, pp.56-7 and 98-101, who introduce the notion of 'soft responsibility' to describe the institutionalised non-compliance response system.

¹⁷¹ Chayes & Handler Chayes, *op.cit.* n.123.

¹⁷² *Ibid.*, p.25.

¹⁷³ See E.Brown Weiss, 'Strengthening Compliance with International Environmental Agreements', 27(4) *Env't Pol. & L.*, 1997, pp.297-303.

¹⁷⁴ See Chayes & Chayes, *op.cit.* n.123, pp.272-4.

¹⁷⁵ On the legitimating function of international law see M.Virally, 'Panorama du Droit International Contemporain', 183 *Receuil des Cours*, p.9; T.Franck, *The Power of Legitimacy among Nations*, 1990; and Chayes & Chayes, *op.cit.* n.166, on the 'new sovereignty' concept that depends on active participation in the major treaty 'clubs'.

¹⁷⁶ See Chayes & Chayes, *op.cit.* n.137, p.328; Handl, *op.cit.* n.74, p.327; and Susskind, *op.cit.* n.132, p.101.

¹⁷⁷ See E.Brown Weiss, *In Fairness to Future Generations*, 1989.

¹⁷⁸ For a discussion of this concept in the Mediterranean context, see E.Raftopoulos, 'The Barcelona Convention System: An International Trust at Work', 7(1) *I.J.E.C.L.*, 1992, pp.27-41.

¹⁷⁹ See Gehring, *op.cit.* n.170, pp.50-4.

criticism; as was already mentioned above and will be further explained in Chapter 6, this process can actually lead to considerably enhanced effectiveness of the respective international regime.

This paradigm will be thereafter referred to as 'the comprehensive institutional model', because it is characterised by the establishment and regular operation of an array of international organs with predetermined roles in every aspect of the life of international environmental regimes. It will moreover be discussed in Chapter 6 as a *prima facie* traditional mechanism, not in terms of general international law, but rather in the context of international environmental law. This is due to the fact that it has already been long-established and wide-spread in international regimes of environmental protection - in that sense, it is the 'mainstream' approach -, but also because, strictly speaking, it does not introduce any new legal concepts, at least in its simpler version actually practised in the Mediterranean.

Having said that, one of its more valuable contributions to the evolution of compliance control in international environmental regimes is that it endows international organs with the authority to follow-up and scrutinise state behaviour after treaty rules are established. In this sense, although it does not take effective control off the hands of individual states, it brings to the forefront international institutions representing the collective interest and thus having their own dynamic as almost independent actors.

But when it comes to ability to effectively follow-up and enforce international environmental standards, these organs have to rely almost exclusively on monitoring and reporting carried out by the parties whose behaviour is supposed to be scrutinised. Thus, the independent role of international institutions is undermined as it exceedingly depends on individual states and their attitudes towards the said obligations. Therefore, notwithstanding its qualities,¹⁸⁰ the 'comprehensive institutional approach' is highly politicised. Professor Boyle has in the past assessed the experience of the existing institutional arrangements, and on a rather negative note has remarked that they are no different from any other political institution in that "they are no more than the expression of their members' willingness or unwillingness to act".¹⁸¹ In this connection, openness and transparency of processes becomes crucial, as these are elements that contribute towards increased public shaming and the ensuing pressure put on states to respect their commitments, and involve other actors of the international society, such as the public, and especially NGOs,¹⁸² in the follow-up of international environmental norms that they care to see fulfilled.

That said, the 'comprehensive institutional model' can be tightened by introducing stricter and more formalised 'non-compliance procedures', which might involve, for instance, compulsory

¹⁸⁰ On the system's political and psychological merits see Kiss & Shelton, *op.cit.* n.1, p.100.

¹⁸¹ Boyle, *op.cit.* n.170, p.231.

¹⁸² On the increasing significance of NGO involvement, see Chayes & Chayes, *op.cit.* n.123, Chapter 6 and pp.259-70; P.J.Sands, 'The Role of Non-Governmental Organizations in Enforcing International Environmental Law', in Butler (ed.), *op.cit.* n.161, pp.61-8; and J.Cameron, 'Compliance, Citizens and NGOs', in J.Cameron, J.Werksman & P.Roderick (eds.), *Improving Compliance with International Environmental Law*, 1996, pp.29-42..

and more independent inspection and monitoring; introduction of complaints procedures;¹⁸³ increased use of independent data to supplement and correct national reports coupled with the establishment of independent compliance review bodies;¹⁸⁴ and/or firm organisational links between the different supervision techniques applied in a given treaty system so as to form what may be called a 'supervision package'.¹⁸⁵ In this connection, of particular importance is the inclusion of financial mechanisms of assistance in the institutional arrangements of treaty regimes in order to balance the stronger enforcement element that underlies stringent compliance control, and provide effective solutions to the difficulties identified which very commonly stem from lacking resources.

There are of course considerable difficulties involved in such an evolution and the proliferation of 'compliance control procedures' has not been impressive.¹⁸⁶ In fact, the institutional structure of MAP presents all the weaknesses of the traditional paradigm, and the scope for improvements does not seem promising at present, notwithstanding the fact that the issue of developing a non-compliance procedure has been on the MAP agenda since 1978.¹⁸⁷

Now, it is commonly accepted that the most developed system of international law-making, follow-up, and enforcement is that of the European Union. Its compliance control mechanism is characterised by the existence of a relatively independent organ, the Commission, with extensive follow-up and enforcement powers, combined with a most effective tool of pressure, namely the management of huge funds. These powers are - importantly - exercised in a series of formal and informal stages, and may culminate to adjudication by a highly respected tribunal, the ECJ.¹⁸⁸ In this case, the international institution is, indeed, a law enforcer proper; there are also some other elements, including citizen involvement in initiating compliance control, and the flexibility of the possible courses of action the Commission can take to address infringements of Community law, that make this model more effective than any other. That is not to say that there are still no weaknesses to overcome; in fact the merits of the system are only relative and actual compliance with environmental standards in particular is far from perfect at Community level.¹⁸⁹

Be that as it may, this model can not be replicated in other international environmental regimes, not because it is fundamentally *sui generis*,¹⁹⁰ but because it is a product of an entire integration process that has been going on for many decades now and which has resulted in a regional legal order - and web of interests - covering a very extensive range of subjects, apart from

¹⁸³ See Hurrell & Kingsbury, *op.cit.* n.159, pp.27-8.

¹⁸⁴ See O.Greene, 'International Environmental Regimes: Verification and Implementation Review', 2(4) *Env'l Politics*, 1993, pp.155-73.

¹⁸⁵ See Sachariew, *op.cit.* n.151, pp.50-1.

¹⁸⁶ See *infra*, Chapter 5, p.223.

¹⁸⁷ See *ibid.*, pp.190-3.

¹⁸⁸ See *ibid.*, pp.231-8.

¹⁸⁹ See Chapter 7, pp.318-21

¹⁹⁰ See P.Sands, 'European Community Environmental Law: The Evolution of a Regional Regime of International Environmental Protection', 100(8) *Yale L.J.*, 1991, pp.2518-20.

environmental protection. Its relevance to the Mediterranean stems both from the fact that the Mediterranean Member States are subject to it, and from the lessons that can certainly be learned from its actual operation for the Barcelona regime as a whole, especially with regard to the importance of elaborating on the monitoring and reporting requirements.¹⁹¹

3.2.4. Financial Mechanisms and Provision of Resources to Facilitate Compliance.¹⁹²

As noted in previous Sections, the approach which places particular significance to compliance facilitation through the availability of international funding for environmental projects gained considerable impetus in the 80s and early 90s, and has the advantage of addressing what is perceived as a core reason for non-compliance, namely lack of material resources. This realisation, together with increasing acceptance of the 'common but differentiated responsibility' concept, have led to considerable developments at the global level, such as revisions of the policies of international banks and the establishment of GEF. Institutional funding mechanisms forming part of conventional regimes, such as those provided for under the Montreal Protocol, the Biodiversity and the Climate Change Convention, are evidence to this trend, and have the important merit of linking the provision of financial resources with concrete actions in compliance with treaty provisions.

The significance and complications of international financial mechanisms devoted to the attainment of environmental objectives, as well as the related but distinct issue of transfer of environmentally sound technology, are increasingly appreciated by the international community as central concerns in the effort to translate legal undertakings into tangible practice, especially after the pivotal relevant developments that have taken place in the early 90s.¹⁹³ Edith Brown Weiss has in this connection asserted that "the dominant issue in international environmental law for the 1990s is likely to be one of equity, who pays whom how much to clean up the environment or develop in an environmentally sustainable way".¹⁹⁴

However, it seems that most of these ambitious pronouncements have to date remained in paper, as, in the light of real life, the Rio enunciations seem to be more a product of political expediency than sincere commitments. In 1994, Günther Handl put this in rather strong terms:

"Indeed, the Rio assumption that governments might be able to honor the huge financial commitments - estimated to amount to more than \$600 billion per year for the period of 1993-2000 -... now looks downright naive."¹⁹⁵

Notwithstanding this apprehension, the Fourth Section of Agenda MED 21 adopted in 1994, the same year that bleak forecast was made, aspiring to adapt the global Agenda 21 to the special

¹⁹¹ See *infra*, Chapter 5, pp.223-31.

¹⁹² See generally, Sands, *op.cit.* n.1, Chapter 19.

¹⁹³ See Agenda 21, Chapter 19.

¹⁹⁴ E.Brown Weiss, 'Introductory Note', 28 *J.L.M.*, 1989, p. 1302

¹⁹⁵ Handl, *op.cit.* n.74, p.309.

features and needs of the Mediterranean region, deals with implementation of the strategy for sustainable development in the area in the same spirit.¹⁹⁶ The first issue raised here is again that of financial resources and mechanisms required,¹⁹⁷ and various co-operative actions to this effect are suggested, such as reviewing bilateral funding agreements in the light of sustainable development; allocating a share of Northern countries' GDP to international public assistance; reducing developing states' debts or converting a proportion thereof into activities for environmental protection; raising funding, especially multilateral public funding, from banks, notably the World Bank and the European Investment Bank (EIB), and UN institutions; develop multilateral, regional or sub-regional projects and use the funding available to address problems concerning the world environment; and strengthening MAP's role, capacities, and financial resources. Moreover, transfer of environmentally-sound technologies and capacity-building are thought to be particularly significant for the implementation of sustainable development in the Mediterranean.¹⁹⁸

Despite its current centrality, this approach finds its limit at the need it creates for a continuous commitment for transfer of funds from rich to poor countries. The prediction that budgetary constraints in developed countries which are the principal donors will probably halt or at least not increase funding of international economic incentive systems,¹⁹⁹ in the absence of overwhelmingly urgent needs, such as the closure of the Chernobyl nuclear plant, seems justified.²⁰⁰ Moreover, it is suggested that the 'trust funds' established under environmental treaties today present "problems of transaction costs and operational inefficiency similar to the 'treaty congestion' syndrome which has already been diagnosed in environmental law. The real risk here is that acute 'trust fund congestion' could lead to chronic funding fatigue".²⁰¹

Be that as it may, the GEF Council 1995 decision that funding would be withheld from any countries failing to meet their obligations under the relevant treaty for which funding was being provided underlines the positive developments that may take place in the future.²⁰² Accordingly, Chapter 7 will be exclusively devoted to the issue of compliance incentives and assistance, because it has the potential to play a very significant role in the context of the international regime for the protection of the Mediterranean in particular. Although, as was already noted, this approach is especially constructive in the broader framework of the 'comprehensive institutional model',

¹⁹⁶ Agenda MED 21, November 1st 1994, Doc. MED 21/PC2/Rev.3, Nov.94.

¹⁹⁷ Chapter XXXIII.

¹⁹⁸ See Chapter XXXIV.

¹⁹⁹ See Chayes & Chayes, *op.cit.* n.137, pp.318 and 320.

²⁰⁰ See Handl, *op.cit.* n.74, pp.308-9, where it is submitted that the most significant failure of states to date in living up to their UNCED commitments relates to the provision of new financial resources and technology to developing countries. But see A.Steer & J.Mason, 'The Role of Multilateral Finance and the Environment: A View from the World Bank', 3(1) *Indiana J.of Global Leg.Studies*, 1995, pp.35-45, for a more optimistic view maintaining that multilateral financial institutions will substitute individual states in providing necessary resources.

²⁰¹ See Sand, *op.cit.* n.76, p.29; and Sjöberg, *op.cit.* n.103, p.161.

²⁰² See E.Brown Weiss, 'The Five International Treaties: A Living History', in Brown Weiss & Jacobson (eds.), *op.cit.* n.123, p.171.

separate treatment is dictated by the fact that relevant funding actually comes from various other sources as well; what is more, in the Mediterranean, there is much scope for linking Community funding to non-member states, with the achievement of specific treaty targets for pollution abatement, in the new stage of intra-regional co-operation known as the 'Euro-Mediterranean Partnership'.²⁰³

3.2.5. Compliance Control and Enforcement under National Law.

In Chapter 2 it was pointed out that the world community in general, and Mediterranean states in particular, have accepted that there exists a common interest in controlling activities carried out within exclusive national jurisdictions and in protecting the quality of the marine environment in each country. Modern international environmental law is, in fact, directed primarily towards taking measures against harmful activities within the territory of each state, and in substance bears on the same polluters as national law.²⁰⁴ Furthermore, some international obligations are so tightly defined that a compatible implementation involves a specific legal position for individuals.²⁰⁵

As Professor O'Connell remarks:

"One can predict that the need for enforcement will increase as environmental law develops more concrete, detailed and wide-reaching rules. International environmental law already resembles domestic law more than it does other areas of international law. The reason is clear: environmental protection has less to do with state-to-state affairs than with the activities of individuals, which are the focus of most domestic law. Due to increased action and technological complexity, the corporate-type world of traditional international law has shifted to the world of local administration. Although much of environmental law continues to primarily rely on compliance inducement, the need for enforcement will undoubtedly increase. But what kind of enforcement will be necessary?"²⁰⁶

It is true that international law has, as yet, not accommodated that international community interest; it has not greatly interfered in the domain of national enforcement and has not set relevant harmonised procedural standards, as has been done for example in the human rights area. Such a development, it is submitted, could be a potentially useful by-pass to the inherent inadequacies of the other approaches to compliance control, inasmuch as the existing compliance-control arsenal of the highly developed - when compared to the international - national legal orders could be explored and enhanced.

²⁰³ See *infra*, Chapter 6, pp.274-8.

²⁰⁴ See J.Ebbesson, *Compatibility of International and National Environmental Law*, 1996, p.xix.

²⁰⁵ *Ibid*, p.56-62.

²⁰⁶ M.E.O'Connell, 'Enforcement and the Success of International Environmental Law', 3(1) *Indiana J. of Global Leg.Stud.*, 1995, p.57 *et seq.*

It will be demonstrated in Chapter 7 that already today the possibility exists - at least in principle - of enforcing international standards in domestic jurisdictions through the courts. However, the situation is not satisfactory as it stands. In this context, international regulation, in the form of procedural public rights, would enable citizens to be fully informed about the environmental implications of any activity within state borders, and participate in the decision-making, follow-up and enforcement stages with regard to international - and national, for that matter - standards in their country. Giving private persons and NGOs access to information and standing would empower them to effectively challenge both private and government actions or inactions that disregard or directly violate such standards in administrative and judicial *fora*. In other words, it would give those actors that are adequately concerned to speak for the common interest - have the necessary incentive - the practical ability and legal authority to become active in the compliance control effort.

To this effect, there are three sets of legal concepts and rules to build upon: The procedural public rights and concomitant duties that are incrementally being established, mainly in relation to prior environmental impact assessment and access to environmental information; and the concept of equal access in domestic legal systems in order to seek redress for transboundary environmental damage, which can be widened to introduce a state duty to guarantee access to judicial and administrative proceedings for environmental matters in each country, irrespective of transnational elements. These procedural rights will be examined separately in Chapter 8, as it is submitted that they represent the most advanced and promising expression of the idea that international law can legitimately regulate internal procedures directed towards better enforcement of the substantive standards it lays down. Together with the recent emergence of treaty rules in the NAFTA framework whereby the parties undertake to effectively enforce their own domestic legislation for the protection of the environment,²⁰⁷ they indeed point to a shift of focus towards bridging the gap between elaborate international regulation and ineffective control over compliance.

As will be shown in Chapter 7, this approach is closely linked with the content and formulation of the primary rules established at the international level, and the extent they restrict state discretion as to the way they will have to be implemented, in view of the fact that many jurisdictions demonstrate considerable reluctance when it comes to interpreting international law in a way that would impose considerable burdens on the state. Its main weakness, however, lies in the fact that the exercise of public rights is inexplorably linked with the width and depth of democracy and the development of civil society and environmental awareness in each country. These prerequisites are not always present in Europe, let alone in the rest of the Mediterranean region, and in this respect there is not much scope for outside intervention.

²⁰⁷ See *infra*, Chapter 8, pp.358-62.

Chapter 4.

THE TRADITIONAL APPROACH TO NON-COMPLIANCE WITH INTERNATIONAL ENVIRONMENTAL LAW: STATE RESPONSIBILITY AND CIVIL LIABILITY.

This Chapter examines the traditional non-compliance mechanisms of state responsibility and civil liability as they apply in particular to the field of international environmental law: The first Section discusses these features of the state responsibility concept that make it ineffective when it comes to responding to breaches of international environmental law. The second Section goes on to examine the civil liability approach arguing that, although, as it stands today, it also has a limited significance in relation to violations of international law, this approach nevertheless has a greater potential for evolving into an effective tool for enhanced enforcement of international environmental obligations within national jurisdictions.

4.1. State Responsibility in International Environmental Law.¹

In international law, violation of a legal norm is deemed to bring into existence a set of 'secondary' rules that allocate obligations and rights, an enforcement mechanism generally referred to as 'state responsibility'. Indeed, the principle whereby a state is responsible for any breach of international obligations incumbent upon it is one of the cornerstones of the international legal system, since "public opinion generally holds that the effectiveness of a legal order depends on the good functioning of responsibility for the violation of its rules".² However, precise formulation of the legal relationships created from such an infraction and the consequences flowing from it has turned out to be a task fraught with formidable difficulties;³ the fact that the International Law Commission (ILC) has been working on the codification of the topic for more than thirty years is illustrative of the controversy surrounding the issues involved.⁴

¹ On state responsibility in general, see I.Brownlie, *System of the Law of Nations: State Responsibility*, Part I, 1983; and M.Spinedi and B.Simma (eds.), *United Nations Codification of State Responsibility*, 1987.

² See A.Kiss, 'Present Limits to the Enforcement of State Responsibility for Environmental Damage', in F.Francioni & T.Scovazzi (eds.), *International Responsibility for Environmental Harm*, 1991, p.11.

³ See ILC, Commentary on Draft Article 1, *YB.I.L.C.*, 1973, Vol.II, pp.173-6.

⁴ See ILC, *Draft Report of the of the International Law Commission on the Work of its Forty-Eighth Session, Chapter III, State Responsibility*, A/CN.4/L.528/Add.2, 16 July 1996. For a characteristically critical view of the ILC's work, see Ph.Allot, 'State Responsibility and the Unmaking of International Law', 29 *Harv.I.L.J.*, 1988, pp.1-26.

International law on state responsibility for breach of environmental obligation,⁵ despite considerable preoccupation of international scholars with the issue,⁶ follows the slow evolution of general state responsibility rules, and has not often been resorted to.⁷ In fact the Trail Smelter case is the only instance that a country has conceded to being responsible for damage caused to a neighbouring state by pollution originating in its own territory.⁸ All subsequent environmental instruments are either silent on this point or delegate further clarification of the rules on responsibility to the future, and typically single out liability for transboundary damage from all possible breaches of environmental obligations as the subject most susceptible to elaboration. The instruments examined in Chapter 2, and the Barcelona Convention and Protocols in particular, are no exception to this pattern.

Having said that, the LOSC calls for the development and application of state responsibility standards, while reaffirming the general rule of responsibility and consequent liability of states for breach of their environmental obligations (Art.235(1)). At the same time, it seems to move further by disconnecting these notions from loss or damage to the interests or environment of other states,⁹ which implies that states are responsible even for failure to fulfil their duties vis-à-vis their own marine environment or the high seas, and by apparently introducing liability even when there is no breach of obligation (strict liability).¹⁰ The emphasis that the LOSC places on domestic civil liability rules as opposed to international state responsibility is rather realistic and mirrors the present state of international law, that prefers procedures to obtain compensation for transboundary environmental damage to be pursued at the inter-individual rather than the inter-state level.¹¹ This is achieved by means of civil liability regimes that will be discussed in Section 4.2.

It should be said at this point that it is normal for treaties not to speak about the conditions and juridical consequences of any breach of the obligations they pronounce; what is actually

⁵ Note that most of the relevant literature is concerned, for reasons that will become apparent, with 'transboundary environmental harm', and not breach of environmental obligations as such.

⁶ See, among others, P.-M. Dupuy, *La Responsabilité Internationale des Etats pour les Dommages d'Origine Technologique et Industrielle*, 1976; A. Kiss & D. Shelton, *International Environmental Law*, 1991, at Chapter VIII; and F. Francioni and T. Scovazzi (eds.), *op.cit.* n.2. On the specific area of marine pollution, see, e.g. G. Handl, 'International Liability of States for Marine Pollution', XX1 *Can. Y.B.I.L.*, 1983, pp.85-117; and B.D. Smith, *State Responsibility and the Marine Environment - The Rules of Decision*, 1988.

⁷ In fact, Kiss asserts that there has been no serious attempt to apply state responsibility rules since the Trail Smelter arbitration in 1941, *op.cit.* n.2, p.9. Based on the absence of state practice, Zemanek goes as far as maintaining that there is no general principle of state responsibility for environmental harm, see K. Zemanek, 'State Responsibility and Liability', in H. Neuhold, K. Zemanek & W. Lang (eds.), *Environmental Protection and International Law*, 1991, pp.187-8.

⁸ Trail Smelter Arbitration, 3 *R.I.A.A.*, 1941, p.1907.

⁹ See A.E. Boyle, 'Marine Pollution under the Law of the Sea Convention', 79 *A.J.I.L.*, 1985, p.367.

¹⁰ See B. Kwiatkowska, *The 200-Mile EEZ in the New Law of the Sea*, 1989, p.187.

¹¹ See Kiss, *op.cit.* n.2, pp.4 and 9-11.

exceptional is for the former to contain both 'primary' and 'secondary' obligations. When an instrument is silent, it is general international law that determines these issues.¹²

4.1.1. The Constituent Elements of State Responsibility.¹³

Under general international law, responsibility comes into play when an act or omission,¹⁴ attributable to a state, breaches one of its international obligations.¹⁵ Two elements are therefore required, a subjective one, "conduct consisting of an action or omission is attributable to the State under international law", and an objective element, "a breach of an international obligation of the State".¹⁶ It is very important to note in this context that 'damage' is inherent in any breach of international obligation, and does not, therefore, constitute a third separate element of state responsibility.¹⁷

As far as the subjective element is concerned, it is sometimes said that in modern international law there is attribution to states of almost any private activity within their jurisdiction or control.¹⁸ However, in the environmental sphere, responsibility does not involve real attribution, but rather breach of the duty to control private activities; in other words, the responsibility of a state is only occasioned by acts of private persons, and derives from some separate conduct attributable to the state and related to these acts.¹⁹

Turning now to the objective element, i.e. conduct failing to honour an international obligation, Draft Article 16 of the ILC attempts to delineate the meaning of international breach; it reads as follows:

"There is a breach of an international obligation by a State when an act of that State is not in conformity with what is required of it by that obligation, regardless of its origin or character."

¹² In any case, the absence of conventional provisions on responsibility in environmental treaties should not be viewed as evidence of their 'soft' character, see M.Spinedi, 'Les Conséquences Juridiques d'un Fait Internationallement Illicite Causant un Dommage à l'Environnement', in Francioni & Scovazzi (eds.), *op.cit.* n.2, pp.78-9.

¹³ See, generally, E.J. de Arechaga, 'International Responsibility', in M.Sorenson (ed.), *Manual of Public International Law*, 1968, pp.534-40.

¹⁴ Responsibility for omission was found to exist in, e.g., the US Diplomatic and Consular Staff in Teheran Case, 1980 *I.C.J. Reports*, p.392 at paras.66-68.

¹⁵ For a discussion of such possible acts or omissions in breach of obligations under the London Convention, see G.Kasoulides, 'State Responsibility and Assessment of Liability for Damage Resulting from Dumping Operations', 26 *San Diego L.Rev.*, 1989, pp.509-10.

¹⁶ See ILC, State Responsibility, Draft Article 3, UN Doc.A/CN.4/L.569, 4 August 1998.

¹⁷ For a detailed discussion of this issue, see A.Tanzi, 'Is Damage a Distinct Condition for the Existence of an Internationally Wrongful Act?', in Spinedi & Simma (eds.), *op.cit.* n.1, pp.1-33.

¹⁸ For a criticism of that notion, see 'Developments - International Environmental Law', 104 *Harv.L.Rev.*, 1991, pp.1507-8.

¹⁹ See Commentary on Draft Article 11, *YB.I.L.C.*, 1975, Vol.II, p.71 *et seq.*

The proposed definition seems to be essentially circular, and some authors suggest it is redundant.²⁰ It actually seems that the ILC included that formulation because it wanted to stress that what constitutes an international breach is a matter to be decided entirely by international law,²¹ as opposed to domestic legal systems, and to imply that even partial contradiction with an international obligation may entail responsibility.²² In fact, it is sufficient that at least some aspect of the state conduct is not *in conformity* with what is legally prescribed by a specific rule.

The ILC subsequently made a distinction that provides some considerable insight into the substantive content of international rules and the multiplicity of ways they can be violated. It is the distinction between obligations of 'conduct' and of 'result' in Draft Articles 20 and 21.²³ According to them, fulfilment of an obligation of conduct (or of means) requires the use of specifically determined means. Obligations of result, on the other hand, leave states freedom in the choice of means, even to the extent that if the initial means chosen fail to achieve the required result, states have the right to resort to other means to that end. International law can be even more permissive, allowing for the accomplishment of a secondary result in discharge of an international duty. An example can be found in environmental treaties prohibiting certain activities, e.g. the illegal seaborne movement of hazardous waste, as proscribed in the Basel Convention, and at the same time requiring states that have not succeeded in preventing such actions to simply punish the culprits; in such an instance, the state would be internationally responsible only in so far as it has failed to impose punishment and not before.

Obligations of result predominate in instances where international regulation aims at bringing about a certain situation within domestic legal systems, although it sometimes specifies the use of a certain course of conduct in order to achieve this target. Hence, the real difference between the two types of obligations is whether they address the particular actions - or omissions - a state must undertake in order to achieve the desired result. It is not surprising, therefore, that it would often be difficult to distinguish between the two;²⁴ for instance, an obligation forbidding dumping of hazardous waste into the sea is an obligation of conduct prohibiting official undertaking of such activities, but also of result requiring the use of whatever means necessary to guarantee that dumping is not carried out by private actors under state jurisdiction. Besides such two-faceted international rules, there are also cases where the degree of precision regarding the means specified in a norm is so minimal that makes it akin to a mere obligation of result.

²⁰ See, e.g., R. Pisillo-Mazzeschi, 'Termination and Suspension of Treaties for Breach in the ILC Works on State Responsibility', in Spinedi & Simma (eds.), *op.cit.* n.1, p.64.

²¹ See S. Rosenne, *Breach of Treaty*, 1985, pp.45-84, on the meaning of breach in the law of state responsibility.

²² See ILC, Second Report on State Responsibility, UN Doc. A/CN.4/498, 17 March 1999, at para..7.

²³ See *ibid.*, paras.52-80. Note that these articles were deleted from the draft in 1999, see ILC, Draft Articles on State Responsibility, UN Doc.A/CN.4/L.574, 1999.

²⁴ See B. Graefrath, 'New Trends in State Responsibility', 20 *Thesaurus Acroasium*, 1993, pp.118-9.

There is no scarcity of relevant examples within the body of international law examined in Chapter 2; indeed, the majority of international instruments addressing marine pollution in the Mediterranean area stipulate the adoption of 'appropriate legislation', more often alongside other measures and policies that are deemed suitable to bring about the required control and protection. The ILC insists that these rules, however vague, remain obligations of conduct since they give some indication of what the 'appropriate measures' might be, even when the particular course of action is only implicitly underlying the general context of a convention.²⁵ It follows that adoption of 'appropriate legislation' forms an integral part of the commitment states have undertaken at the international level and cannot be overlooked or bypassed. But when the means mentioned are only indicative, in the sense that they are not a binding course of action and the state concerned may just ignore them and choose some other conduct instead, then the obligation is one of result. The substantial difference then is one of mere wording.

In any case, as far as obligations of means are concerned, when the specific conduct of a state and its organs is not in conformity with that actually prescribed, there is a direct breach of the obligation in question without any other prerequisites, such as that the breach should have some kind of harmful consequences. With regard to obligations of result, on the other hand, the factor determining if a breach has occurred is whether the desired result has *in concreto* been achieved or not. It is irrelevant in this context that measures which would have in theory seem more suitable have not been taken, or that a state has adopted some unfruitful course of action that it hoped would be successful, or even that, conversely, it has adopted a measure likely in principle to obstruct the achievement of the result required, but which in itself does not create a situation fundamentally incompatible with this result. This evaluation is made even more difficult by qualifications, often inserted in the formulation of obligations of result, such as those requiring, e.g., elimination of land-based pollution, 'as far as possible', thus giving an extremely relative content to the desired result.

One last issue that should not be disregarded in this connection is the nature of general treaty commitments concerning co-operation among parties. Their vague and uncertain phrasing has led some international lawyers to express doubts as to their binding nature and as to the possibility of enforcing international responsibility for their breach.²⁶ In relation to the first point, it is submitted that an undertaking to co-operate might at first sight seem simply hortatory, but usually acquires a much more specific content if read together with the institutional structures and procedures that are set up by the instrument in which the former is contained.²⁷ As to the second point, it is true that it is difficult to conceive how a state can substantiate a concrete breach of an

²⁵ See *Y.B.I.L.C.*, 1977, Vol.II, Part Two, pp.16-7, giving the example of ILO Conventions which implicitly call for the adoption of legislation.

²⁶ See R.Pisillo-Mazzeschi, 'Forms of International Responsibility for Environmental Harm', in F.Francioni & T.Scovazzi (eds.), *op.cit.* n.2, p.18.

²⁷ See *infra*, Chapter 5, pp.186-90.

obligation to co-operate, so as to invoke the law of state responsibility. However, the example used by Pisillo-Mazzeschi in support of the suggestion that breach of such obligations cannot entail state responsibility, i.e. the 1979 Geneva Long-Range Air Pollution Convention's express stipulation that it does not contain rules on state responsibility, may well be read reversely. It could well be an indication that state responsibility standards are in principle applicable, if there is a need to exclude them explicitly.

4.1.2. The Requirement of 'Fault'.

Let us now turn to one of the questions that has plagued international lawyers, namely whether responsibility requires fault - *dolus* or *culpa*, or in its more advanced form failure of due diligence, or it is 'strict', shifting the burden of proof from the victim to the perpetrator, who has to prove that a defence exists, or even 'absolute',²⁸ not admitting any defence whatsoever.

In international law, responsibility has been traditionally based on fault.²⁹ Nevertheless, it has been convincingly argued that when treaty or custom is silent, the default regime is one of 'strict' ('relatively objective' in European continental doctrine) responsibility, whereby the state will be held liable for any breach of international law by its organs unless it can show that compliance was impossible for reasons not caused by the state itself.³⁰ It is true that states - and the ICJ, for that matter - generally do not require proof of negligence or ill-intent before protesting, or adopting counter-measures against, violations of international, and especially treaty, rules.³¹ In the same vein, the ILC Articles do not require fault and can, therefore, be construed as supporting this general regime.³²

That said, in international environmental law, most treaties lay down undertakings to prevent pollution qualified in more or less precise terms, e.g. to "take all appropriate measures", "using the best practicable means" (LOSC, Art.194), and thus create obligations of 'due diligence' and not absolute ones.³³ Some, however, contain specific prohibitions of polluting activities to which, according to some jurists, corresponds strict responsibility. In fact, many have tried to prove the existence of a strict responsibility rule,³⁴ especially in relation to the marine environment,³⁵ their

²⁸ In fact, there is only one treaty devoted specifically to international responsibility for damage that may relate to the environment, namely the 1972 Space Objects Liability Convention, establishing a rule of absolute responsibility.

²⁹ For the different views, see P.-M. Dupuy, 'Le Fait Générateur de la Responsabilité Internationale des États', 188 *Receuil des Cours*, 1984/V, pp.28-110.

³⁰ See B. Conforti, *International Law and the Role of Domestic Legal Systems*, 1993, p.166.

³¹ *Ibid.*, p.167.

³² *Ibid.*, p.168.

³³ See Developments..., *op.cit.* n.18, p.1495; and Pisillo-Mazzeschi, *op.cit.* n.26, pp.19-20.

³⁴ On views in favour of strict or absolute liability in international environmental law in general, existing independently of any breach of obligation, and finding its legal basis on general principles of law, equity, sovereign equality or good neighbourliness, see S. Schneider, *World Public Order of the Environment*, 1975, Ch.6; G. Handl, 'Liability as an Obligation Established by a Primary Rule of International Law' XVI *Neth. YB.I.L.*, 1985, p.77; (continued...)

main evidence being proliferation of civil liability conventions establishing a rule of strict liability to which the states themselves are ultimately submitted. On the other hand, it is often argued that the concept of strict responsibility is not supported by state practice, and, moreover, it might not be entirely useful either as the ensuing compensation is limited and might leave part of the cost of transboundary damage with the innocent victim.³⁶

This controversy might have lost some of its significance, however, since 'due diligence' is no longer equated with fault,³⁷ having become a more objective test consisting in violation of a substantive obligation without going into the motives or knowledge of the non-compliant state. Hence, the - arguably - most important element of responsibility, the burden of proof, seems to have been reversed, so that the accused state now has to prove that it has exercised the required due diligence.³⁸ In fact, each case has to be considered separately on its own merits, and state responsibility will come into play when a specific environmental obligation is breached, be it conventional or customary such as the general rule demanding prevention of significant damage to other states or common areas (Principle 21, Stockholm Declaration; Principle 22, Rio Declaration). The latter has attracted most of the attention, as it is deemed to offer the maximum potential for some real life application of legal theory.

This last principle is also connected with much of the controversy surrounding the work of the ILC on the topic of 'international liability for the injurious consequences of acts not prohibited by international law', which began in the late seventies.³⁹ In fact, the Commission did not seem to share the conclusion that the burden of proof in relation to 'due diligence' has been reversed in international environmental law. Hence, in an effort to overcome the obstacle of having to prove failure of 'due diligence' in order to substantiate a claim of state responsibility for transboundary environmental harm, and also desiring to ensure that when such harm is effected by otherwise perfectly beneficial activities, the latter would not be rendered illegal under international law, it undertook the task of formulating a set of primary obligations governing 'ultra-hazardous', or 'high-

³⁴(...continued)

L.F.E.Goldie, 'Concepts of Strict and Absolute Liability and the Ranking of Liability in Terms of Exposure to Risk', *ibid.* p.175. More modest is the notion of 'ultra-hazardous activities' which entail strict or absolute responsibility, see C.W.Jenks, 'Liability for Ultra-Hazardous Activities in International Law', 117 *Receuil des Cours*, 1966/I, p.105; and *infra*, pp.145-6.

³⁵ The seminal work in this context is that by Smith, *op.cit.* n.6, esp. at Chapter 8; see also Kasoulides, *op.cit.* n.15, pp.513-6, with regard to dumping.

³⁶ See, e.g., A.E.Boyle, 'Making the Polluter Pay? Alternatives to State Responsibility in the Allocation of Transboundary Environmental Costs', in Francioni & Scovazzi (eds.), *op.cit.* n.2, pp.364-5.

³⁷ See F.O.Vicuña, 'State Responsibility, Liability, and Remedial Measures under International Law: New Criteria for Environmental Protection', in E.Brown Weiss (ed.), *Environmental Change and International Law: New Challenges and Dimensions*, 1992, p.152.

³⁸ See, e.g., Kasoulides, *op.cit.* n.15, p.510, with regard to due diligence obligations arising out of the London Convention.

³⁹ See, among others, C.Tomuschat, 'International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law: The Work of the International Law Commission', in Francioni & Scovazzi (eds.), *op.cit.* n.2, pp.37-72; and Conforti, *op.cit.* n.30, pp.170-1.

risk' activities, causing transboundary harm. The whole project has enormous theoretical complications,⁴⁰ and has been subjected to intense criticism, which is basically premised on the idea that what is in issue when considering whether a state is internationally responsible is the content of the rule allegedly infringed, and that, usually, it is not an activity that is prohibited as such, but the harm it causes.⁴¹ All this contention caused considerable delays and strenuous re-drafting and has led to a complete change of focus which currently lies in 'prevention of transboundary damage from hazardous activities',⁴² while the whole issue of whether the ILC should continue is being reconsidered.⁴³

4.1.3. The Consequences of State Responsibility.

Once international responsibility is established, the question is what are the consequences flowing from it. The prevalent opinion maintains that a new legal relationship is created involving 'secondary' norms,⁴⁴ and requiring the culprit state to make adequate reparation.⁴⁵ Moreover, a right of the injured party to impose proportional counter-measures is recognised. In other words, there are two kinds of juridical consequences from an internationally wrongful act, namely new obligations to provide reparation, and the faculty (or right) of injured states to apply counter-measures (or sanctions).⁴⁶

4.1.3.1. Remedies for Breach of International Obligation.

The remedies available to address an internationally wrongful act include cessation of the illegal act, and reparation which may entail restitution in kind; compensation; satisfaction; and assurances and guarantees of non-repetition.⁴⁷ Thus, the first duty incumbent upon the culprit is to repeal the act which violates its international obligation.⁴⁸ The second remedy, i.e. to re-establish the preexisting situation, or to provide restitution in kind is the central consequence of state responsibility. However, this might entail disproportionate expense, or be unfeasible; then the

⁴⁰ For an insight into these difficulties, see Handl, *op.cit.* n.34, p.49-79.

⁴¹ See, e.g., Brownlie, *op.cit.* n.1, p.50; A.E.Boyle, 'State Responsibility and International Liability for Injurious Consequences of Acts Not Prohibited by International Law: A Necessary Distinction?', 39 *I.C.L.Q.*, 1990, pp.1-26; and Smith, *op.cit.* n.6, pp.40 *et seq* and 124 *et seq.* For support of the ILC approach, see D.B.Magraw, 'Transboundary Harm: The International Law Commission Study on "International Liability"', 80 *A.J.I.L.*, 1986, pp.305-30; and M.E.O'Connell, 'Enforcing the New International Law of the Environment', 35 *Ger.YB.I.L.*, 1992, p.308.

⁴² See ILC, Report of the Commission to the General Assembly on the Work of its Fiftieth Session, *YB.I.L.C.*, 1998, Chapter IV.

⁴³ ILC, Report of the Commission to the General Assembly on the Work of its Fifty-First Session, *YB.I.L.C.*, 1999, Chapter IX.

⁴⁴ See J.Combacau & D.Alland, "Primary" and "Secondary" Rules in the Law of State Responsibility: Categorizing International Obligations', XVI *Neth.YB.I.L.*, 1985, pp.81-109.

⁴⁵ See the *Chorzów Factory Case*, 1928 *P.C.I.J.*, Ser.A, No.13, p.47.

⁴⁶ See Spinedi, *op.cit.* n.12, p.79.

⁴⁷ See generally, C.Gray, *Judicial Remedies in International Law*, 1987, pp.77-108; Spinedi, *op.cit.* n.12, pp.85 *et seq.*; and Commentary on Draft Articles 5-10bis (now Arts.41-46), *YB.I.L.C.*, 1993, Vol.II, Part Two, pp.55-83.

⁴⁸ For example, in the *Martini Arbitration*, it was ordered that a judgement rendered by the Supreme Court of Venezuela be annulled, see 2 *R.I.A.A.*, 1930, pp.976 *et seq.*

perpetrator has to supply equivalent reparation, which will usually be in the form of pecuniary compensation or indemnity.⁴⁹

Compensation covers 'economically assessable damage', i.e. damage caused to the injured state's territory, organisation, and property, and that caused to physical or juridical persons under its jurisdiction.⁵⁰ The question that still remains, however, is whether compensation triggered by an internationally wrongful act covers purely ecological loss, according to the principle that reparation should address as far as possible all the consequences of the illegal act, or not;⁵¹ or, to put it differently, what constitutes environmental damage in the context of state liability. Indeed, the only clear treaty definition is found in the Convention on the Regulation of Antarctic Mineral Resources Activities (CRAMRA, Art.1(15)), while most other instruments - e.g., the LOSC (Arts.1(4) and 194(5)) - merely define 'pollution', which might be a useful starting point, but it certainly cannot be used interchangeably with 'environmental damage'. State practice has not provided more assistance, so that the threshold at which environmental damage would entail liability will depend on the specific context, and especially on the requirements of the legal standard that is infringed.⁵²

Satisfaction, on the other hand, covers non-material goods, including legal and moral damage. Satisfaction might come in the form of pecuniary compensation,⁵³ or of a judicial declaration of the unlawfulness of an act.⁵⁴ Guarantees against non-repetition can also be viewed as a form of satisfaction, and may include specific measures that a state is asked to take,⁵⁵ such as modification of legislation or adoption of administrative arrangements.⁵⁶ In the environmental context, this will often be more significant and meaningful than award of compensation in cases

⁴⁹ Although there are instances where it takes other forms, see, e.g., Protocol to the 1974 Nordic Convention on the Protection of the Environment, where the injured party can demand the purchase of his real property; and the 1964 Finland-USSR Agreement concerning Frontier Watercourses (Art.5), where the injured party is allowed a new benefit to make up for his losses.

⁵⁰ See *Y.B.I.L.C.*, 1993, Vol.II, Part Two, p.72. Iovane, in *La Riparazione nella Theoria e nella Prassi dell'Illecito Internazionale*, 1990, cited in Spinedi, *op.cit.* n.12, pp.83-4, maintains that the specific cases where there have been claims and awards of reparation (in the sense of pecuniary compensation) concern solely certain categories of illegal acts, not including those resulting in environmental damage. This view is also supported by Conforti, *op.cit.* n.30, pp.200-1. But Spinedi thinks it is important that during the ILC work, no state has doubted the proposition that all illegal acts engage new obligations, including that of compensation for damages caused, see *op.cit.* n.12, p.84, especially at fn.21 and accompanying text.

⁵¹ Some authors, such as Spinedi, reply affirmatively going as far as maintaining that there are no maximum or minimum limits to the compensation due for such loss, see *op.cit.* n.12, pp.103-6.

⁵² See P.Sands, *Principles of International Environmental Law*, Vol.1, 1995, pp.635-7.

⁵³ See, e.g. the *I'm Alone* Arbitration, 3 *R.I.A.A.*, p.1618; and Gray, *op.cit.* n.46, pp.85-92, for a discussion of the relevant literature, case law and treaty provisions. The author concludes that "there is no compelling authority that a mere breach of international law without injury to nationals or material damage to the state should be met by an award of damages by a tribunal", but nevertheless "a state is able to claim damages... for those injuries for which the same remedy would be available... under a 'generalized municipal law standard'", p.91. See *contra*, Zemanek, *op.cit.* n.7, p.192, asserting that under the law as it stands compensation is due for immaterial damage.

⁵⁴ See, e.g. the *Corfu Channel* Case, 1949 *I.C.J. Reports*, p.35.

⁵⁵ See, e.g. the *Trail Smelter* Arbitration, *loc.cit.* n.8, p.1934 *et seq.*

⁵⁶ See *Y.B.I.L.C.*, 1993, Vol.II, Part Two, p.83; and Spinedi, *op.cit.* n.12, pp.112-3.

where there has been no transboundary harm, especially when the obligation breached relates exclusively to the responsible state's own environment.

4.1.3.2. The Question of Standing.

As has been already noted, damage is not a necessary prerequisite under the rules of state responsibility. On the other hand, a central feature of these rules is that they require an 'injured state' that will initiate the international enforcement process, which makes the problem of standing central in the operation of state responsibility.⁵⁷ In this connection, the ILC believes that, in international law, there is an absolute correlation between a legal obligation and a corresponding subjective right;⁵⁸ it follows that 'injured state' is that whose rights have been infringed by an international wrongful act and has standing to invoke the culprit's responsibility.⁵⁹

This idea presupposes a bilateral context which has been long superseded by the proliferation of multilateral conventions purporting to regulate various domains and establishing obligations which "do not run between the States parties at all but rather oblige the contracting States to adopt certain 'parallel' conduct within their jurisdiction...".⁶⁰ The ILC has tried to accommodate the new reality by defining 'injured states' in a multilateral treaty context. Firstly, it has endorsed the notion of 'self-contained regimes' (or 'objective regimes')⁶¹ that may include *ad hoc* definitions of 'injured parties': Although in principle the origin of the obligation infringed upon, be it conventional or customary, does not affect any related responsibility, there are some sub-systems of international law based on treaty that contain, apart from primary, also secondary norms, which would be applicable should a breach occur, leaving general international rules of state responsibility only a residual role.⁶² The most obvious example of such a regime is that of the European Union.⁶³

But even absent any secondary rules defining 'injured states', Draft Article 40(2)(f) provides that in a multilateral treaty context, "any other State party to the... treaty" will be an 'injured state', "if it is established that the right [infringed] has been expressly stipulated in that

⁵⁷ On standing before the ICJ, see Gray, *op.cit.* n.47, pp.211-5.

⁵⁸ See Commentary on Draft Article 3, *YB.I.L.C.*, 1973, Vol.II, p.182; and Commentary on Draft Article 5, Part 2, *YB.I.L.C.*, 1985, Vol.II, Part Two, p.25.

⁵⁹ See Draft Article 40 and Commentary, *YB.I.L.C.*, 1985, Vol.II, Part Two, pp.25-7.

⁶⁰ See B.Simma, 'Bilateralism and Community Interest in the Law of State Responsibility', in Y.Dinstein (ed.), *International Law at a Time of Perplexity* (Essays in Honour of Shabtai Rosenne), 1989, p.823.

⁶¹ See *US Diplomatic and Consular Staff in Teheran* Case, *loc.cit.* n.14, p.40. The term was first introduced by B.Simma, in 'Self-Contained Regimes', XVI *Neth.YB.I.L.*, 1985, p.135.

⁶² See Commentary on Draft Article 17, *YB.I.L.C.*, 1976, Vol.II, Part Two, pp.80-1; and Commentary on Draft Article 2, Part 2, *YB.I.L.C.*, 1983, Vol.II, Part Two, pp.42-3. See also XXV *Neth.YB.I.L.*, 1994, dedicated to the topic. For some critical observations on this concept, see P.Šturma, 'Law of Treaties Reflected in State Responsibility Rules', 19 *Thesaurus Acroasium*, 1992, pp.568-71. See also M.Koskenniemi, 'Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol', 3 *YB.I.E.L.*, 1992, pp.134-7, on the Montreal Protocol as a 'self-contained regime'; and M.A.Fitzmaurice, 'International Environmental Law as a Special Field', XXV *Neth.YB.I.L.*, 1994, pp.181-226.

⁶³ See *infra*, Chapter 5, pp.231-7; and Chapter 7, pp.321-8.

treaty for the protection of the collective interests of the States parties thereto".⁶⁴ The ICJ has authoritatively stated in this context that "a legal right or interest need not necessarily relate to anything material or 'tangible', and can be infringed even though no prejudice of a material kind has been suffered",⁶⁵ but went on to reject the notion of *actio popularis* in international law by saying that "such rights or interests, in order to exist, must be clearly vested in those who claim them, by some text or instrument, or rule of law...".

There is some opinion, however, in favour of recognising an *actio popularis* in international law, especially in treaties of the CRAMRA type,⁶⁶ pointing to the "contradiction of finding that an obligation could exist which could not be enforced through dispute settlement procedures".⁶⁷ In this context, the Barcelona Traction case is very significant in that it recognised that with regard to certain obligations owed to the world community as a whole, i.e. *erga omnes*, all states possess a 'legal interest' in their fulfilment.⁶⁸ The potential existence of such obligations is gaining acceptance, even in relation to environmental interests,⁶⁹ especially areas beyond national jurisdiction; in fact, as Spinedi argues, in these cases the only kind of obligation that can possibly be conceived is an obligation *erga omnes*.⁷⁰ According to this line of reasoning, the idea of a legal interest is a legal fiction invoked when international law wants to vest 'third states' with standing to challenge a breach of a legal norm, especially when there is no particular injured state to seek remedy for an infraction, e.g. when environmental damage is caused to a common space,⁷¹ or in instances when the violation relates to an obligation towards the perpetrator's own environment.

The real question, then, is to determine the relevant norms in concrete terms and to decide whether states 'not directly injured' have the same rights as those 'directly injured',⁷² since remedies available to third states may be limited according to the circumstances of the breach.⁷³ Be that as it may, most international lawyers are in favour of collective remedial action, i.e. measures adopted by global, regional, or specialised organisations having authority and interest in the subject of the

⁶⁴ See Commentary on Draft Art.40, *Y.B.I.L.C.*, 1985, Vol.II, Part Two, p.27.

⁶⁵ See the South-West Africa Case (Second Phase), 1966 *I.C.J. Reports*, p.32.

⁶⁶ See, e.g., K.Leigh, 'Liability for Damage to the Global Commons', 14 *Austr.Y.B.I.L.*, 1993, pp.50-52.

⁶⁷ See the Nuclear Tests Cases, 1974 *I.C.J. Reports*, per Judge Petren, at p.303; and also The SS Wimbledon Case, 1923 *P.C.I.J.*, Ser.A, No.1; and the Military and Paramilitary Activities in and against Nicaragua Case (Provisional Measures), 1984 *I.C.J. Reports*, at pp.196-8.

⁶⁸ See the Barcelona Traction, Light and Power Co.Ltd. Case, 1972 *I.C.J. Reports*, p.32.

⁶⁹ See M.Ragazzi, *The Concept of International Obligations Erga Omnes*, 1997; and A.de Hoogh, *Obligations Erga Omnes and International Crimes*, 1996.

⁷⁰ See Spinedi, *op.cit.* n.12, p.91.

⁷¹ See J.I.Charney, 'Third State Remedies for Environmental Damage to the World's Common Spaces', in Francioni & Scovazzi (eds.), *op.cit.* n.2, pp.156-7; and A.E.Boyle, 'State Responsibility for Breach of Obligations to Protect the Global Environment', in W.E.Butler (ed.), *Control over Compliance with International Law*, 1991, pp.69-81.

⁷² See Spinedi, *op.cit.* n.12, pp.89-90

⁷³ See Charney, *op.cit.* n.71, pp.158-9 and 161-2.

violation;⁷⁴ in Gray's words, "as far as the concept of responsibility to the international community as a whole is a reality this is through the functioning of international organisations rather than any formal judicial procedure".⁷⁵

Having said that, expert opinion agrees that when an obligation *erga omnes* is breached, all states connected with the norm establishing the obligation are, in principle, authorised to demand cessation of the illegal act, acting even individually; the same applies also to restitution.⁷⁶ But it remains ambiguous what is the exact content of reparation and any possible exceptions.⁷⁷ Hence, the majority of opinion deems compensation an inappropriate remedy when damage has occurred to common areas only, or to the environment of the author state alone.⁷⁸ It is characteristic that not even in the advanced CRAMRA setting has the Commission competence to require compensation by a state in breach of conventional obligations, notwithstanding its capacity to resort to national courts and require compensation by private operators.

4.1.3.3. Counter-Measures.⁷⁹

Counter-measures are generally measures aiming at securing performance of an international norm, and - notwithstanding confusing terminology - include retortions, which are lawful as such, reprisals, which would be unlawful were they not undertaken in response to a breach of international obligation,⁸⁰ and sanctions, which are most commonly used to describe measures adopted by international organisations. Inclusion of such self-help measures, and especially reprisals, in the law of state responsibility is mainly due to the reality that mere rights and obligations of reparation result in endless regression, given that breach of the obligation to provide reparation would itself be a wrongful act etc.⁸¹ These measures do not create a new legal relationship, however, but are merely coercive action with a view to restoring the violated legal order, similar to that of sentencing or execution of judgments under municipal law.

More specifically, retortions do not entail violation of a rule, but rather a form of unfriendly behaviour, e.g. the scaling down of diplomatic relations, or commercial co-operation, or even

⁷⁴ See, e.g., *ibid*, p.160; and O'Connell, *op.cit.* n.41, pp.311-3.

⁷⁵ Gray, *op.cit.* n.47, pp.214-5.

⁷⁶ See, e.g., *ibid*, pp.92-3 and 101.

⁷⁷ See *ibid*, pp.93-5. Note, e.g., that the ILC has chosen to exclude *restitutio in integrum* when it is proven 'excessively onerous', see Draft Article 43.

⁷⁸ See Spinedi, *op.cit.* n.12, pp.106-8; but the author draws on human rights compensation to admit by analogy that, at least in multilateral treaty context, there can be an organ assigned to receive such a sum awarded as damages, see pp.108-9.

⁷⁹ See generally *ibid*, pp.114 *et seq.* On the legality of counter-measures for breach of treaty obligation, see the Air Services Agreement Arbitration, XVIII *U.N.R.I.A.A.*, p.529.

⁸⁰ See Commentary on Draft Arts. 13 and 14, Part 2 (now Draft Arts.47-50), Official Records of the General Assembly, Fiftieth Session, Supplement No.10 (A/50/10), 1995, pp.144-73.

⁸¹ See generally, P.Malanczuk, 'Counter-Measures and Self-Defence as Circumstances precluding Wrongfulness in the International Law Commission's Draft Articles on State Responsibility', in Spinedi & Simma (eds.), *op.cit.* n.1, pp.197-286.

economic sanctions imposed by individual states outside the UN collective security system and within the framework of international trade law. As such, they are not subject to special limitations. Reprisals, on the other hand, have to be proportionate to the alleged violation, although not perfectly equivalent, i.e. they may concern a totally unrelated rule. In any case, they cannot involve the threat or use of force,⁸² extreme economic or political coercion, infringements of the inviolability of diplomats, derogations from basic human rights, or any other conduct in contravention of peremptory norms of general international law,⁸³ and in general departure from obligations *erga omnes*.⁸⁴ For breach of such obligations international institutions are solely responsible to decide on an appropriate response.⁸⁵

A form of reprisal is reciprocal non-compliance, i.e. suspension of the operation of an agreement vis-à-vis a party in breach of a fundamental provision, as envisaged in Article 60 of the Vienna Convention on the Law of Treaties. Article 60(2), in particular, provides that any state party to a multilateral treaty has standing to assert unilateral or collective remedies against another party that has violated a provision of the treaty, although a state not specially affected by the breach may seek remedies only "through collective decisions of the states parties".⁸⁶ This response - and *a fortiori* termination of the operation of a treaty, works well in a bilateral reciprocal relationship,⁸⁷ but is inappropriate for a multilateral regime of environmental protection.⁸⁸ Fisher, for one, thinks that reciprocity tends to be destructive of the regime as breaches accumulate and the law is finally disregarded, while on the other hand, it rarely deters a particular breach otherwise desirable.⁸⁹

Expulsion and withdrawal of membership privileges, with the bad publicity, political isolation and the resulting possible loss of access to services and resources attached, is a form of sanction available to the parties of a treaty that is thought to have some considerable potential,⁹⁰ and

⁸² See Art.2(4) of the UN Charter; and the Military and Paramilitary Activities in and against Nicaragua Case (Merits), 1986 *I.C.J. Reports*, p.14.

⁸³ See R.Jennings & A.Watts (eds.), *Oppenheim's International Law*, Vol.II, 1992, pp.135-44.

⁸⁴ See Spinedi, *op.cit.* n.12, pp.118-9; and A.Rosas, 'State Responsibility and Liability under Civil Liability Regimes', in O.Bring & S.Mahmoudi (eds.), *Current International Law Issues: Nordic Perspectives* (Essays in Honour of Jerzy Sztucki), 1994, p.176.

⁸⁵ See Commentary on Draft Art.30, *Y.B.I.L.C.*, 1979, Vol.II, Part Two, p.118-9.

⁸⁶ Spinedi argues that 'non-directly injured states' in a multilateral context can also adopt individual reactive action, *op.cit.* n.12, pp.119-24.

⁸⁷ On the right to suspend the operation of or terminate a treaty following a breach, see, among others, Lord McNair, *The Law of Treaties*, 1961, Chapter XXXVI; and G.Haraszti, *Some Fundamental Problems of the Law of Treaties*, 1973, Chapter VII.

⁸⁸ See A.Chayes & A.Handler Chayes, 'Compliance Without Enforcement: State Behaviour under Regulatory Treaties', 7 *Negotiation J.*, 1991, pp.317-8; R.Wolfrum, 'Means of Ensuring Compliance with and Enforcement of International Environmental Law', 272 *Receuil des Cours*, 1998, pp.56-7; and Rosas, *op.cit.* n.84, esp. at p.175.

⁸⁹ R.Fisher, *Improving Compliance with International Law*, 1981, p.139, and Chapters III and IV.

⁹⁰ On the compliance-inducing role of these factors, see O.R.Young, *International Cooperation - Building Regimes for Natural Resources and the Environment*, 1989, p.71-6; and R.Axelrod, *The Evolution of Cooperation*, 1984.

can be readily implemented at no cost, unlike economic sanctions.⁹¹ This course of action has been never resorted to in the environmental sphere so far, as it is thought that it “degrades the value of the regime for those who remain” as well.⁹² However, it has recently been brought back to the limelight through its inclusion in the indicative list of measures against defaulting parties in the ozone non-compliance procedure examined in the next Chapter. Actual practice will, of course, be the ultimate test of whether this old notion can acquire new content and be used effectively as a response to non-compliance in an environmental context. In fact, treaties can give each contracting state the express right to implement sanctions in reaction to breaches of the rules established therein,⁹³ but this is more than anything a merely theoretical possibility. In practice, it is the creation of institutionalised and centralised control mechanisms, which helps concretise the common interest of contracting parties, using the power to coerce through co-operation and pressure as opposed to confrontation.

It must also be said at this point that although sanctions have been long understood as official state, i.e. government, unilateral or collective action, they are increasingly used by other actors, such as corporations, NGOs and the general public, initiating measures against governments, corporations or even individuals in an informal, self-organised manner without legitimisation under international law.⁹⁴ In this context, attribution of formal legal powers to NGOs appears again significant, but also calls for a radical revision of the established structure of the international legal order.

A variation of this approach gaining acceptance as an enforcement tool of increased effectiveness is the use of sanctions linking environmental compliance to other issues, for instance trade or other economic sanctions, not necessarily directed against governments but against nationals or corporations in breach of international obligations.⁹⁵ This type of response can be undertaken either in a multilateral or unilateral setting, the main example of the latter approach being US legislation imposing economic sanctions against states which violate international conservation

⁹¹ See M.P.Doxey, *Economic Sanctions and International Enforcement*, 1980, esp.at Chapter 6, and pp.129-31. For critical views on sanctions as a response tool for non-compliance with international law in general, see A.Chayes & A.Handler Chayes, *The New Sovereignty - Compliance with International Environmental Agreements*, 1995, at Part I.

⁹² See Chayes &Chayes, *op.cit.* n.91, at Chapter 3.

⁹³ See, e.g., ECSC Treaty, Art.88, whereby Member States may refuse to perform their basic obligations in response to the non-performance of an obligation by another Member State, but only with the authorisation of the Commission, and through specific proceedings which may include referral to the ECJ. No similar rule can be found in the EEC Treaty, and the ECJ has furthermore indicated that unilateral measures of reprisal are never permitted in the EEC system, see Case 232/78, 1979 *E.C.R.*, p.2739.

⁹⁴ See D.Tolbert, ‘Global Climate Change and the Role of International Non-Governmental Organisations’, in R.Churchill and D.Freestone (eds.), *International Law and Global Climate Change*, 1991, pp.104-6.

⁹⁵ See L.Jenkins, ‘Trade Sanctions: An Effective Enforcement Tool’, 2(4) *R.E.C.I.E.L.*, 1993, pp.362-9; Wolfrum, *op.cit.* n.90, pp.58-77; R.B.Mitchell, *Intentional Oil Pollution at Sea - Environmental Policy and Treaty Compliance*, 1994, pp.51, 63 and 324-5; and Chayes and Chayes, *op.cit.* n.88, p.318.

treaties to which the US is a party.⁹⁶ However, the Mexican Tuna decision of the GATT panel shows that the legitimacy and potential of such course of action is still very much in doubt.⁹⁷ A relevant example in a multilateral context is provided by the CITES Standing Committee Recommendation that Parties ban trade in wildlife products with China for violating prohibitions on trade in rhinoceros horns and tiger parts.⁹⁸

There is, indeed, some scope for examining the utility of such an approach in the framework of the EU - third Mediterranean countries relationship. If provision of funds, for instance, was conditioned upon performance of certain environmental measures required under international and/or Community environmental law, failure to execute the latter could bring about termination of future funding; that in traditional international law terms and in an inter-state context would be a reprisal, which, however, could be effective in inducing compliance with the said environmental conditions.⁹⁹

4.2. International Regimes of Civil Liability for Pollution Damage.

Let us now examine the development and application of civil liability regimes, which, as already noted, is the model international environmental law favours in order to remedy environmental harm. What should be made clear from the start is that this is not a type of international enforcement for breach of obligation as those already described, but rather a method to repair damage caused by pollution incidents - as opposed to cumulative damage from operational pollution - and compensate victims using the domestic legal machinery through minimum harmonisation. Hence, apart from the general underlying duty not to cause harm, breach of obligation does not appear as a central theme any more, since the object of regulation is the private polluter as such - as opposed to states - in implementation of the 'polluter pays' principle.¹⁰⁰

Having said that, civil liability regimes contain primary obligations entered into by States with respect to persons under their jurisdiction. "Civil liability can thus be one way of satisfying State liability",¹⁰¹ by preventing and punishing conduct that would be in contradiction with international undertakings should the state itself be the actor. When viewed in this way, state responsibility will arise when compensation by a private person is precluded due to the state's

⁹⁶ Through the Packwood-Magnuson Amendment to the Magnuson Fishery Conservation and Management Act of 1978; and the Pelly Amendment to the Fishermen's Protective Act of 1967, see Chayes & Chayes, *op.cit.* n.90, pp.88-96.

⁹⁷ See U.S. - Tuna Import Measures, B.I.S.D./29S/91, 1982.

⁹⁸ See E.Brown Weiss, 'Strengthening Compliance with International Environmental Agreements', 27(4) *Env'l Pol. & L.*, 1997, pp.298-9.

⁹⁹ See O'Connell, *op.cit.* n.41, p.319; and *infra*, Chapter 7, p.290.

¹⁰⁰ See Boyle, *op.cit.* n.36. See also Barcelona Convention, Art.4(3)(b); ASEAN Convention, Art.10(d); 1992 Watercourses Convention, Art.2(5)(b); 1992 Paris Convention, Art.2(2)(b); and 1992 Baltic Convention, Art.3(4), upholding this principle with regard to marine environmental damage.

¹⁰¹ Leigh, *op.cit.* n.66, p.140; and see similar reflections in Kasoulides, *op.cit.* n.15, pp.505-6.

failure to perform its treaty obligations, e.g. failing to enact appropriate legislation, and that responsibility will be strict.¹⁰²

Finally, there is another *prima facie* connection of civil liability with inducing compliance with international environmental obligations, i.e. its deterrent effect;¹⁰³ in other words, the threat of being held liable may help make private actors more conscious in abiding with international anti-pollution standards in their everyday activity.

The subsequent Sections will examine civil liability provisions in treaties for the protection of the marine environment, civil liability instruments, as well as the issue of compensable pollution damage.

4.2.1. Civil Liability in International Conventions for the Protection of the Marine Environment.

Liability issues are addressed in the LOSC in a manner reminiscent of earlier formulations, such as Principle 22 of the Stockholm Declaration calling for co-operation with a view to developing international law on liability and compensation concerning environmental damage to areas beyond national jurisdiction.¹⁰⁴ Hence, the LOSC envisages the development and application of that body of law, but also gives some indication of the elements it should include: Pursuant to Article 235(3), relevant rules should aim at assuring "prompt and adequate compensation in respect of all damage caused by pollution of the marine environment" by establishing "criteria and procedures for payment of adequate compensation, such as compulsory insurance or compensation funds". Parties are also required to make remedies available in their legal systems in respect of damage caused by natural or juridical persons under their jurisdiction (Art.235(2)).¹⁰⁵

An earlier formulation can also be found under the London Convention, which, in Article X, states:

"In accordance with the principles of international law regarding state responsibility for damage to the environment of other states or to any other area of the environment, caused by dumping of wastes and other matter of all kinds, the Contracting Parties undertake to develop procedures for the assessment of liability and the settlement of disputes regarding dumping."

¹⁰² See Kasoulides, *op.cit.* n.15, pp.514-6, with regard to dumping.

¹⁰³ Wolfrum, *op.cit.* n.88, p.107. Notwithstanding the controversy surrounding the deterrent role of liability, see, e.g., S.E.Gaines, 'International Principles for Transnational Environmental Liability: Can Developments in Municipal Law Help Break the Impasse?', 30 *Harv.I.L.J.*, 1989, 326-8; and A.Bianchi, 'The Harmonization of Laws on Liability for Environmental Damage in Europe: An Italian Perspective', 6(1) *J. Env't L.*, 1994, p.28 at fn.28.

¹⁰⁴ It is characteristic of the very slow progress that as the Stockholm Declaration called for co-operation with a view to developing of the law regarding liability for environmental damage to areas beyond national jurisdiction, so did the Rio Declaration (Principle 13) twenty years later, albeit in somewhat broader term.

¹⁰⁵ In this respect Article 235 is deemed insufficient, because it omits reference to a similar duty incumbent upon the victim's state, see Boyle, *op.cit.* n.9, p.368.

This Article does not recognise that, under international law, a state incurs responsibility for environmental damage to other states or to the environmental areas beyond national jurisdiction as such, but it does acknowledge certain principles that could be applied to damage to the environment even beyond the limits of national jurisdiction; in this context, it is noteworthy that it was the first time such a provision was included in a treaty.

Despite its merits, the provision has been described as 'extremely primitive',¹⁰⁶ and a concrete liability regime for dumping has yet to be developed,¹⁰⁷ notwithstanding a 1985 Resolution of the Consultative Meeting of the Parties calling upon the Parties to develop procedures for the assessment of liability and the relevant work that ensued.¹⁰⁸ Kasoulides thinks that this idea is ripening among Contracting Parties, and that a more effective interpretation and application of the Convention, based on customary law, the LOSC, the Draft ILC Articles and several other liability agreements is called for, which should entail strict and limited liability of the operator coupled with a system of state funds to compensate for damage exceeding the liability ceiling of private operators, as well as for gradual, long-term damage, and unidentified pollution.¹⁰⁹ However, there is every indication that these ideas are not ripe enough yet, since no consensus could be reached during the 1996 revision process even on a deadline for the development of a liability regime.

The Barcelona Convention negotiators also left liability and compensation issues to be dealt with in the future. In the 1995 revision, these issues were still unresolved, and the undertaking to "co-operate in the formulation and adoption of appropriate rules and procedures for the determination of liability and compensation for damage resulting from pollution of the marine environment" (Art.16) remained vague.¹¹⁰ As a matter of fact, discussions on the possibility of establishing an Inter-State Guarantee Fund to compensate victims of marine pollution are being held since 1976.¹¹¹ Under the work plan produced by the Fifth Meeting of the Parties, appropriate procedures were to be adopted by 1989, and the Fund to be established by 1990.¹¹² However, still today no such development seems imminent.¹¹³

¹⁰⁶ G.J.Timagenis, *International Control of Marine Pollution*, 1980, pp.274-5.

¹⁰⁷ On the enormous difficulties in and unlikelihood of developing a concrete regime of state responsibility for dumping of radioactive materials, see J.Juste, 'L'Immersion en Mer de Déchets Radioactifs et Responsabilité Internationale', in Francioni & Scovazzi, *op.cit.* n.2, pp.207-30.

¹⁰⁸ LDC.21(9), 27 September 1985; and see Kasoulides, *op.cit.* n.15, pp.499-500, on ensuing deliberations.

¹⁰⁹ *Ibid.*, pp.511-23.

¹¹⁰ Cf. 1992 Convention on the Protection of the Black Sea against Pollution, Art.XVI, where more specific obligations with regard to compensation and liability, such as availability of recourse for victims, are set out.

¹¹¹ See Final Act of the 1976 Conference, Resolution 4.

¹¹² See UNEP, Report of the Fifth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols, UNEP/IG.74/5, 28 September 1987, p.30.

¹¹³ Note that the latest relevant initiative consists in inviting the Secretariat to convene a meeting of legal and technical experts to review the relevant draft in 1995, see UNEP, Report of the Ninth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols, UNEP(OCA)/MED IG.5/16, 8 June 1995, Annex XIII, p.2.

The related Protocols do not add anything new and are rather typical examples of environmental conventions completely undermining a response that comes in play after harm has been done and/or an international rule has been disregarded, focussing on prevention instead. This can be best illustrated by Article 12(1) of the revised Land-Based Protocol, which provides for preventive consultations of the Parties concerned when pollution originating from a Party “is likely to prejudice directly the interests” of others, that is before damage has actually occurred.

Having said that, the Offshore Protocol, although following the paradigm of the Convention in that it delegates the issue to future negotiations (Art.27(1)), moves somewhat further: It stipulates that pending preparation and adoption of appropriate procedures for the determination of liability and compensation, the Parties shall take all measures to ensure that liability for damage caused by offshore activities is imposed on the operators, and that they shall be covered by appropriate insurance and be required to pay prompt and adequate compensation, on the basis of strict and limited liability (Art.27(2)).¹¹⁴ Thus, although it does not harmonise civil liability rules in all countries, it does lay down the minimum standards that have to be satisfied throughout the Mediterranean region. Furthermore, the Protocol provides that the Parties “shall endeavour, in accordance with their legal systems and, where appropriate, on the basis of an agreement, to grant equal access to and treatment in administrative proceedings” to persons affected by pollution caused by offshore activities in other states (Art.26(4)). It is, thus, unfortunate that this example is not followed in the Hazardous Waste Protocol. The latter does direct its Parties to set out, “as soon as possible”, guidelines for the evaluation of damage, as well as rules and procedures for liability and compensation in relation to harm caused from the transboundary movement and disposal of hazardous wastes (Art.14), but does not establish any minimum requirements in this connection.

4.2.2. International Conventions on Civil Liability for Pollution Damage.

The only clearly shaped regimes of civil liability are, in fact, established under completely separate conventions, and have no direct connection with substantive international regulation governing pollution of the marine environment. The relevant instruments that will be subsequently examined are the 1969 Convention on Civil Liability for Oil Pollution Damage (CLC), the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Fund Convention), the 1996 Convention on Liability for Damage in Connection with the Carriage of Hazardous and Noxious Substances at Sea (HNS Convention); the 1999 Protocol on Liability and Compensation to the Basel Convention; and the 1993 Convention on Civil

¹¹⁴ Note that the French and Community delegations expressed a reservation pending consideration with regard to that paragraph, see UNEP, Final Act and Protocol of the Conference of Plenipotentiaries on the Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil, UNEP(OCA)/MED IG.4/4, 14 October 1994.

Liability for Damage Resulting from Activities Dangerous to the Environment (Dangerous Activities Convention).¹¹⁵

4.2.2.1. 1969 CLC and 1971 Fund Convention.

In the specific area of marine pollution, only with regard to damage caused by oil tankers involved in accidents have there been significant long-standing international commitments and schemes aiming at achieving global uniformity and ensuring that adequate compensation is awarded to victims,¹¹⁶ under the 1969 CLC and the 1971 Fund Convention.

The main elements of the CLC consist in the establishment of strict liability imposed on shipowners for oil pollution damage (Art.III(1)), with only exceptional defences, such as war and natural disasters, third party sabotage, or deficient navigational aids (Art.III(2) and (3)); the fixed ceiling of compensation - the limit of liability in each specific case depends on the tonnage of the ship - except in incidents resulting from "the owner's actual fault or privity", when liability is unlimited (Art.V); the compulsory insurance required to guarantee the shipowners' ability to compensate coupled with a right of direct action against the insurer (Art.VII); and the specification of the competent *forum*, which is the court of the Party in whose territory the damage occurred (Art.IX). The Parties have to implement this regime in domestic law: They have to ensure that competent authorities certify that ships under their flag are covered by insurance, and that no ship enters or leaves a port without such a certificate (Art.VII(10) and (11)); that national courts have the necessary competences (Art.IX(2)); and that foreign judgments are recognised (Art.X).

A shipowner involved in an accident falling under the scope of the Convention has to establish a fund with the court under whose jurisdiction the relevant claims fall (Art.V). The CLC tries to ensure that there will be no liability beyond that fund, and any other assets of the owner will remain out of the reach of claimants during litigation. Should, however, the amount prove insufficient to cover claims in their entirety, the maximum available is to be distributed *pro rata* among claimants. The owner is entitled to participate in the distribution himself, in order to recover expenses he incurred in the course of combatting the adverse effects of the spillage.

It should be noted in this context that often damage is not confined to the territory or territorial sea of one state, but extends to two or more; for instance, in the *Haven* incident in April 1991, pollution reached three adjacent CLC states, namely Italy, France and Monaco, but all claims

¹¹⁵ The nuclear civil liability conventions are also applicable in the Mediterranean, but as has been already noted their subject matter is excluded from the scope of this thesis. On the limited utility of these conventions, as demonstrated by the Chernobyl accident, see P.Strohl, 'Réflexions sur la Responsabilité pour les Dommages Nucléaires dans l'Espace Maritime', XI *Annuaire de Droit Maritime et Aéro-Spatial*, 1991, pp.55-60; and P.Sands, *Chernobyl: Law and Communication*, 1988.

¹¹⁶ Notwithstanding the recent NHS Convention, see *infra*, pp.161-2; see also E.Gold & C.Petrie, 'Pollution from Offshore Activities. An Overview of the Operational, Legal and Environmental Aspects', in C.M.de la Rue (ed.), *Liability for Damage to the Marine Environment*, 1993, pp.221-2, for a brief discussion of the 1977 Convention on Civil Liability for Oil Pollution Damage Resulting from Exploration for and Exploitation of Seabed Mineral Resources which has not been influential as it did not attract an adequate number of ratifications.

were made against the sole fund established by the shipowner in Italy.¹¹⁷ The choice of *forum* allowed for the liable party in such instances is an obvious defect of the Convention, as the owner will choose the jurisdiction more favourable to his case and institute his fund in a way that would compel the victims to have their claims heard in that jurisdiction.

The Fund Convention purports to supplement this scheme by spreading the costs involved to the oil industry as well,¹¹⁸ i.e. oil importers contributing according to the quantities of oil they receive each year (Art.10). The money levied is administered by an international body, the International Oil Pollution Compensation Fund (IOPC Fund). More specifically, states have to furnish the Director of the Fund with details on the persons liable to contribute and data on the relevant quantities of oil received by such persons (Art.15(2)).¹¹⁹ Under paragraph 4 of the same Article - added by the 1984/1992 amendments - a state that does not fulfil the above obligation is liable to compensate the Fund for any resulting economic loss.

Accordingly, the Fund Convention comes into play when full compensation cannot be obtained under the CLC, either because the shipowner has a defence, or he is incapable of meeting his obligations, or - more frequently -¹²⁰ the specific damage exceeds the limit of liability (Art.4(1). This Convention has also, until recently, served to partially relieve shipowners of the increased liability under the CLC. At the time of the first Fund Conference, partial indemnification of the shipowner's liability which was made dependent on his actual compliance with the four most important conventions concerning maritime safety and pollution avoidance - including the 1954 OILPOL, later superseded by MARPOL - was hailed as an environmental victory that would encourage a responsible attitude on the part of shipowners. It is, hence, unfortunate that this provision has been repealed by the 1984/1992 amendments.

The Fund may be exonerated in certain situations, e.g. war, or when the owner did not comply to international standards, or when damage was caused due to his "wilful misconduct" (Art.4(2) and 9). In such instances, the Fund has rights of recourse against both the shipowner or

¹¹⁷ See *infra*, p.177.

¹¹⁸ It should be noted that the additional compensation schemes of a private nature, namely the 1969 Tanker Owners Voluntary Agreement concerning Liability for Oil Pollution (TOVALOP) drawn up by tanker owners and bareboat charterers; and the Contract Regarding a Supplement to Tanker Liability for Oil Pollution (CRISTAL) which involved major consumers of oil, as well as oil companies and traders, were not renewed after they expired on 20 February 1997; it was deemed that over the years they eroded as more states became Parties to the CLC and Fund Conventions, and could henceforth act only as disincentives for countries that had not yet ratified these treaties, see IOPC Fund, *Annual Report 1995*, p.31. On the operation of these schemes, see I.C.White, 'The Voluntary Oil Spill Compensation Agreements - TOVALOP and CRISTAL', in de la Rue (ed.), *op.cit.* n.116, pp.57-69.

¹¹⁹ The 1997 annual contributions were in the amount of £64 million. The countries whose nationals contributed most in the General Fund in 1997 were Japan (22.83%), Italy (11.96%), the Republic of Korea (9.39%), the Netherlands (8.54%), France (7.99%), and the UK(6.2%). It must be noted that the total levy is not comparable from year to year; thus, in 1981 it was £500,000, in 1983 £24,106,000, in 1984 there was no levy, whereas, in 1993, it reached a record of £78 million, see IOPC Fund, *op.cit.* n.118, p.25.

¹²⁰ Fifty-eight out of sixty-one incidents dealt with by 1992 fell under this category, see M.Jacobsson, 'The International Conventions on Liability and Compensation for Oil Pollution Damage and the Activities of the International Oil Pollution Compensation Fund', in de la Rue (ed.), *op.cit.* n.116, p.40.

his guarantor and third parties, which it exercises as a matter of principle especially in most sizeable pollution incidents.¹²¹ This provision is especially important for present purposes: What it really amounts to is unlimited liability for the shipowner who fails to observe international regulations for, among others, pollution avoidance.

Three factors, namely the use of experienced surveyors and lawyers, the co-operation with the P & I Clubs (insurance companies) and the Director's authority to make relatively high payments without prior approval by the Executive Committee, enable the Fund to make settlements of claims and payments of compensation in most cases in a relatively short period of time. All small and medium sized claims are normally paid within a month of agreement being reached.¹²² Even the larger claims have been settled within reasonable periods of time after the incident. The actual time needed for settlement is almost entirely dependent on the quality of documentation submitted in support of the relevant claims. When settlement cannot be reached, claims can be brought before the courts of the contracting state where damage occurred against the Fund itself.¹²³

Having said that, the specific amounts payable soon proved to be too low to meet inflation, and the Conventions have been amended to provide for higher limits of compensation,¹²⁴ reaching a total of £192 million soon after the 1992 Protocols entered into force. The 1984/1992 amendments also extended the area of application of the Conventions so as to cover, apart from the territorial seas of Parties, their EEZs as well, and introduced several other changes, the most important being the reviewed definition of 'pollution damage' so as to partially cover impairment of the environment as such (Art.2(3)(a)). In fact, the main criticism that have been articulated against the oil liability regime established under the two Conventions centers exactly on their attitude towards compensable 'pollution damage' that seems to exclude ecological loss *per se*; this issue will be discussed in greater detail below.

Another weak point is the Conventions' coverage which is restricted to damage in the territory or marine areas under national jurisdiction and does not address the problem of high seas pollution. It is additionally limited to 'persistent oils' and only when carried by a tanker as cargo or fuel. Furthermore, the claimant must normally identify the particular source of oil, sometimes a difficult task given the multitude of possible sources. This means that often there will be no compensation for damage from unidentified oil slicks which are themselves the product of normal operational tanker activities of benefit to oil transportation interests in general. As far as accidents

¹²¹ See IOPC Fund, *Annual Report 1987*, pp.10-6, on the case of the *Tanio*; and IOPC Fund, *op.cit.* n.118, pp.37-8, on the *Rio Orinoco* case.

¹²² See Jacobsson, *op.cit.* n.120, p.48.

¹²³ See, e.g. the *Palmos* Case, *infra*, p.174-7.

¹²⁴ On the relevant negotiations, see M.Göransson, 'The 1984 and 1992 Protocols to the Civil Liability Convention, 1969 and the Fund Convention, 1971', in de la Rue (ed.), *op.cit.* n.116, pp.71-82.

are concerned, in theory, the Fund is liable even for spills resulting from incidents involving unidentified tankers. However, in practice, no state has succeeded in proving such a case so far.¹²⁵

Finally, it should be pointed out that some provision appears necessary for lessening the burden of proof for the innocent victim.¹²⁶ Even where the source of the spill can be easily identified, great difficulties arise in demonstrating the extent and exact causation of damage. It has been argued in this context that the Fund should have the option of undertaking an independent investigative role.¹²⁷ While this could become an onerous task, the suggestion certainly points to the absence of an independent organisation that could provide both expert advice on combatting pollution incidents and independent assessments of the costs of preventive measures and pollution damage to all Parties.

On the other hand, some very significant accomplishments were achieved through the operation of the CLC and Fund Convention.¹²⁸ Together the two instruments form a uniform international scheme whereby compliance is required with only one set of regulations, all claims from an incident can be consolidated under one jurisdiction, and any judgments rendered are automatically enforceable in all Parties. Furthermore, in utilising strict liability, the CLC is an important development in international law, as is the more nearly absolute liability imposed on the Fund.

Another positive feature of the regime is that the Fund Convention creates an inexhaustible fund, the resources of which are determined by the demands on it. If the Fund were required to pay, for example, a total of \$45 million compensation for a number of incidents in one year, contributions required from cargo-owners for the following year would be adjusted to satisfy such payment. In other words, while the Fund does guarantee compensation regardless of the frequency of oil spills that may occur in the future, it does not require contributions until after the event. Most national funds would not have such flexibility and would require contributions to be made in advance to a dormant fund.

There are also more general advantages that the fund system presents. As regards the victims, it provides a guarantee of solvency of the party liable. Set up immediately after the occurrence of an incident, the fund of the CLC type prevents the victim from having, after a judgment has been awarded, to hunt down the party liable in order to obtain payment. The latter will be inclined to set up a type of fund under the CLC which enables him to limit his liability, while the 1971 Fund offers the added advantage of spreading major risks throughout the oil industry.

¹²⁵ See, e.g., IOPC Fund, *op.cit.* n.118, pp.84-5, on a rejected Moroccan claim; and IOPC Fund, *Annual Report 1993*, pp.55-6, on a similar Portuguese claim

¹²⁶ See R.M.M'Gonigle & M.Zacher, *Pollution, Politics and International Law - Tankers at Sea*, 1979, p.198.

¹²⁷ See, e.g. L.Hunter, 'The Proposed International Compensation Fund for Oil Pollution Damage', 4 *J. of Marit. L. & Com.*, 1972, p.117.

¹²⁸ For an assessment of the achievements and pitfalls of the two instruments, see M'Gonigle & Zacher, *op.cit.* n.126, pp.192-9.

Additional innovative developments are evident in many other areas of the Convention: The mandatory insurance requirements are to be applied to states not party to the Convention; and compensation from the Fund is to be paid to a state Party to the Convention whether or not the flag state of the polluting ship is a party (CLC, Art.VII(11); Fund Convention, Arts.5(3) and 4(1)(a)).

It seems that in average the combination of the two schemes operates efficiently in awarding adequate compensation, although calls for delimitation have recently appeared,¹²⁹ as there are always instances of major accidents where the amount of claims considerably exceeds available funds. Such was the case in the *Haven* incident at Genoa,¹³⁰ or the grounding of the *Exxon Valdez* with an estimated cost of \$2 billion for mere clean-up operations.¹³¹ Nonetheless, the most practical and probably most convincing argument in favour of this international system which allows for settlement of oil pollution claims - as opposed to making judicial resolution unavoidable - is provided by the actual experience of relevant litigation outside this regime, as best exemplified in the judicial proceedings instigated by the *Amoco Cadiz* incident.¹³²

4.2.2.2. 1996 HNS Convention.

A Convention, parallel to the CLC and Fund, covering liability for hazardous pollutants other than oil had been long under preparation. A Conference to that effect, held in London in 1984, ended with no result; the main reasons for that failure were the new and untried ideas put forward, and basic disagreements among the various industrial components involved in the carriage of hazardous and noxious substances, i.e. shipowners and cargo interests on the apportionment of liability.¹³³ It has, in fact, proved more difficult to create a liability regime for this sector of sea-borne trade than it was for the carriage of oil. Complex legal and technical problems surround a comprehensive definition of those substances that actually present an environmental hazard, and the insurance coverage that is needed.

The persistent effort was vindicated, however, in 1996 with the conclusion of the HNS Convention. The compensation system adopted in this instrument is two-tier, on the pattern of the oil liability regime.¹³⁴ The shipowner has strict but limited liability - with exceptions similar to the

¹²⁹ See, for example, D.Wilkinson, 'Moving the Boundaries of Compensable Environmental Damage Caused by Marine Oil Spills: The Effect of Two New International Protocols', 5(1) *J.of Env'l L.*, 1993, pp.79-82; and G.Gauci, 'Limitation of Liability in Maritime Law: An Anachronism?', 19(1) *Mar.Pol.*, 1995, pp.65-74.

¹³⁰ See Wilkinson, *op.cit.* n.129, p.47; and *infra*, p.177.

¹³¹ See M.Rémond-Gouilloud, 'The Future of the Compensation System as Established by International Conventions' in de la Rue (ed.), *op.cit.* n.116, p.91.

¹³² See the *Amoco Cadiz* Case, 2 *Lloyd's Report*, 1984, p.304. For the judge's own account of the litigation, see F.J.McGarr, 'Inadequacy of Federal Forum for Resolution of Oil Spill Damages', in M.L.Spaulding & M.Reed (eds.), *Oil Spills - Management and Legislative Implications*, 1990, pp.78-97.

¹³³ See P.Wetterstein, 'Trends in Maritime Environmental Impairment Liability', 1994(2) *Lloyd's Marit. & Comm.L.Q.*, p.232.

¹³⁴ See A.Renfigo, 'The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances at Sea, 1996', 6(2) *R.E.C.I.E.L.*, 1997, pp.191-7. For an analysis of the 1984 draft and proposals for improvement, see Wetterstein, *op.cit.* n.133, pp.241-5; R.Cleton, 'Liability and (continued...)

CLC - during the carriage of hazardous and noxious substances, linked with the obligation to maintain insurance or other financial security. The relevant substances - carried in bulk or in packaged form - are defined by reference to existing lists utilised in IMO instruments, such as the IMDG Code and others (Art.1(5)). As a second tier, the HNS Fund is set up - administered by an international body along the lines of the IOPC Fund - to which cargo interests will contribute by paying charges levied on HNS carriage, in order to provide compensation for damage resulting from the carriage of HNS by sea to the extent that the protection afforded by the first tier is inadequate or unavailable. The system is finally complemented by jurisdictional and procedural rules for the adjudication of relevant claims in front of national courts.

As far as the Convention's relationship to the general maritime liability instruments, especially the 1976 Convention on Limitation of Liability of Owners of Sea-Going Ships,¹³⁵ is concerned, it is provided that the HNS Convention supersedes any previous instrument to the extent there is a conflict; however, for countries that are not - or will not be - bound by the HNS Convention, the general agreements will remain applicable in the future (Art.42).

Lastly, it is worth noting that compensable damage has been defined by terms similar to those contained in the 1984/1992 Protocol to the CLC (Art.1(5)) discussed below, and covers "reasonable measures of reinstatement" of the environment; it remains to be seen whether the same difficulties will arise in a uniform interpretation and application of the definition in specific cases. The aggregate limits of compensation under the NHS Convention are also similar to those included in the 1992 Protocol to the Fund Convention. This is a rather unfortunate choice in view of the much greater potential threat to the marine environment that spills of HNS present.¹³⁶

4.2.2.3. Protocol on Liability and Compensation to the Basel Convention.

In order to fulfill the mandate of Article 12,¹³⁷ the parties to the Basel Convention entered into lengthy negotiations with a view at formulating uniform rules on liability and compensation for damage resulting from transboundary movement and disposal of hazardous waste.¹³⁸ The most contentious issues during the drafting stage concerned the basis of liability, i.e. whether it will be

¹³⁴(...continued)

Compensation for Maritime Carriage of Hazardous and Noxious Substances (HNS)', in de la Rue (ed.), *op.cit.* n.116, pp.173-88. On the 1991 draft, see R.S.Schuda, 'The International Maritime Organization and the Draft Convention on Liability and Compensation in Connection with the Carriage of Hazardous and Noxious Substances at Sea: An Update on recent Activity', 46 *Univ. of Miami L.Rev.*, 1992, pp.1040-50; and M.I.Drel, 'Liability for Damage Resulting from the Transport of Hazardous Cargoes at Sea', in A.Couper & E.Gold (eds.), *The Marine Environment and Sustainable Development: Law, Policy and Science* (Law of the Sea Institute Twenty-Fifth Annual Conference Proceedings), 1993, esp. at pp.370-3.

¹³⁵ See generally, P.Griggs & R.Williams, *Limitation of Liability for Maritime Claims*, 1991.

¹³⁶ See Rengifo, *op.cit.* n.134, p.195.

¹³⁷ See Final Act of the Conference of Plenipotentiaries on the Global Convention on the Control of Transboundary Movements of Hazardous Wastes, Resolution 3, reprinted in 19 *Env'l Pol.& L.*, 1989, p.76.

¹³⁸ See P.Lawrence, 'Negotiation of a Protocol on Liability and Compensation for damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal', 7(3) *R.E.C.I.E.L.*, 1998, pp.249-55; and B.Rutinwa, 'Liability and Compensation for Injurious Consequences of the Transboundary Movement of Hazardous Wastes', 6(1) *R.E.C.I.E.L.*, 1997, pp.7-13.

based on fault or will be strict or absolute, the desirability of a Fund, and the persons to whom liability should be channelled.¹³⁹

In 1999 the parties adopted a Protocol that aims to provide a comprehensive regime for liability and adequate and prompt compensation in the event of an incident during movement of hazardous wastes, including incidents in the course of illegal traffic in those wastes (Art.1).¹⁴⁰ It covers traditional 'damage', i.e. loss of life, injury, damage to property, and direct loss of income, but also the costs of measures of reinstatement of the impaired environment, and the costs of preventive measures (Art.2(2)(c)). The exporter is strictly liable for any incident that occurs at each stage of a transboundary movement, until the disposer takes possession of the waste; then, the latter assumes liability for any possible damage (Art.4(1)).¹⁴¹ However, if the state of import has listed the specific waste as hazardous and the state of export has not, the importer is liable (Art.4(2)). Moreover, unlimited, fault-based liability is introduced for any person that acted in contravention with the Basel provisions or committed malicious or negligent acts (Art.5 and 12(2)). In this connection, the 1991 Report of the Working Group interestingly featured both state and civil liability considerations; however, the former element has been subsequently removed from the scope of the Protocol (Art.16). This move has been severely criticised on the grounds that the problem of illegal - and, therefore, most likely to cause environmental damage - traffic will not be addressed, if there is no residual liability of the state of origin for any resulting damage. The financial limits of liability are, unlike all other similar regimes, left to be determined by national law (Art.12(1) and Annex B); only *minimum* limits are set depending on the size of shipment, and not on any qualitative indicator of hazard risk. No special fund is established to cover the costs that exceed the limits, although the possibility to do so in the future is not excluded (Art.15). Finally, the regime is complemented by a series of other provisions on compulsory insurance, time limits, and competent courts as in all similar arrangements.

4.2.2.4. 1993 Dangerous Activities Convention.

The only other instrument of potentially global application existing so far - but not in force, nor likely to come into force soon - and covering damage from various environmentally hazardous activities is the 1993 Dangerous Activities Convention.¹⁴² This treaty, although regional (Council of Europe), is open to accession by all states after its entry into force, and aims "at ensuring adequate compensation... and also providing for means of prevention and reinstatement" (Art.1) for

¹³⁹ It should be noted that although the Bamako Convention also assigned the task of formulating specific liability rules to a future date, it specifically requires the imposition of strict, unlimited, joint and several liability on hazardous waste generators (Art.4(3)(b)).

¹⁴⁰ Text at UNEP, Report of the Fifth Meeting of the Parties to the Basel Convention..., UNEP/CHW.5/29, 10 December 1999, Annex III.

¹⁴¹ For critical concerns on this and other provisions expressed by the Australian and Canadian delegations, see <http://www.iisd.ca/basel/cop5/>.

¹⁴² See D.Wilkinson, 'The Council of Europe Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment: A Comparative Overview', 2(5) *Eur.Env'l L.Rev.*, 1993, pp.130-4.

damage caused in the course of activities involving substances inherently dangerous to the environment.

In a remarkably broad definition, 'damage' to the environment (Art.2(c) and (d)) connotes:

"loss or damage by impairment of the environment in so far as this is not considered to be damage... [to life or property] provided that compensation for impairment of the environment, other than for loss of profit for such impairment, shall be limited to the costs of measures of re-instatement actually undertaken or to be undertaken;¹⁴³

the costs of preventative measures and any loss or damage caused by preventative measures...";

while the 'environment' includes natural resources, property forming part of the cultural heritage, and the characteristic aspects of the landscape; but not pollution damage at 'tolerable levels' under local circumstances. This qualification seems to allow for considerable variation between different localities and much scope for judicial discretion in specifying what may be 'tolerated' in a certain place.

'Dangerous activities' are defined by reference to substances involved (Art.2(1) and (2)), and cover the production, handling and storage, use and discharge of substances presenting a risk to man, the environment, and property, according to certain criteria; activities involving modified organisms; and all waste treatment facilities and waste disposal sites. Nuclear damage falling within the scope of relevant international instruments or that of any no less favourable domestic law is excluded,¹⁴⁴ as is damage during carriage other than carriage by pipeline and carriage performed entirely within an installation or on a site inaccessible to the public (Art.4), which also excludes seaborne transport of oil, or hazardous waste.

The Convention covers incidents - significantly including continuous or series of occurrences - that will happen after its entry into force within the territory of Parties irrespective of where the damage actually occurs, or alternatively incidents that happen elsewhere but the law of a Party becomes applicable by virtue of conflict of law rules (Art.3). The operator of the activity, i.e. the person exercising control thereupon,¹⁴⁵ is strictly liable for any damage during his period of control over activities undertaken professionally, including the operation of sites or installations for the incineration, treatment, handling or recycling of waste, and the production, storage, use or release of dangerous substances, hazardous micro-organisms, or genetically modified organisms (Arts.5 and 6). Possible exonerations include damage caused by war, or exceptional natural phenomena; the intent of a third party; an order of public authority; or "a dangerous activity taken lawfully in the interests of the person who suffered the damage, provided that it was reasonable to

¹⁴³ 'Measures of reinstatement' are defined in Art.1(9) as "any reasonable measures aiming to reinstate or restore damaged or destroyed natural resources or, where reasonable, to introduce the equivalent of these resources into the environment". For a brief discussion of the complex legal problems that 'reasonable measures', and 'the equivalent' of the resource destroyed might pose in real-life application, see Bianchi, *op.cit.* n.103, p.29.

¹⁴⁴ On the legal questions that might arise in this connection, see Sands, *op.cit.* n.52, p.674.

¹⁴⁵ On the meaning of operator see, Bianchi, *op.cit.* n.103, pp.131-3.

expose the latter to such risks” (Art.8). Finally, Parties have to ensure that the operator is covered by a financial security scheme or adequate financial guarantee (Art.12).

Competent courts are those of the place where the damage arose; or where the dangerous activity was conducted; or where the defendant has his habitual residence (Art.19). Courts are required, when considering evidence of the causal link between the damage and the incident “to take due account of the increased danger of causing such damage inherent in the dangerous activity”. This Convention importantly provides for public access to information and gives legal standing to environmental NGOs to resort to the administration or even the courts in order to challenge dangerous activities.¹⁴⁶

A Party may formulate reservations regarding a condition of reciprocity in the application of the Convention to damage suffered in the territory of non-parties; non-acceptance of claims by environmental groups; and exoneration of operators for damage caused by substances, genetically modified organisms or micro-organisms, if he proves that scientific knowledge at the time of the incident did not allow the involved risk or dangerous properties to be discovered. It is further provided that as between EU members Community rules prevail. A notable feature of the regime established by this Convention is that instituted under Article 31, whereby when relevant Community rules are modified the Convention itself is modified by a ‘tacit amendment’ procedure; hence, Community law radically influences the international regime.

Evidently, this instrument endeavours to strike a balance between competing interests; what remains to be seen is its actual application and the use that the industry, the victims together with their advocates, and most importantly the courts, are going to make of its broad and sometimes obscure wording. That does not diminish its paramount importance, however, as the first international instrument that establishes civil liability standards for damage to the environment, irrespective of any transboundary effect, to be applied within national borders. In this sense, it provides another example of the shifting focus of international law towards activities carried out exclusively within domestic jurisdictions, and, furthermore, addresses to a greater or lesser extent current concerns with regard to harm caused by cumulative pollution, and to attribution of standing to interested citizens and NGOs in order to challenge polluting practices and, thus, indirectly enforce environmental protection rules.

4.2.4. Civil Liability for Environmental Damage in Community Law.

This changing focus of international regulation to environmental degradation within national borders is also reflected at the EU level. Hence, alongside the work carried out in the framework of global, regional, or sectoral marine pollution conventions, there is on-going debate within the Community with a view to developing uniform rules of civil liability for environmental

¹⁴⁶ See *infra*, Chapter 8, pp.343-4 and 351.

damage. In this context, the Commission, after some years of preparation, came up in 1989 with a proposal for a Council Directive on civil liability for damage caused by waste,¹⁴⁷ which was intended to apply to damage, i.e. death or injury, and impairment to the environment in the territories of Member States, and their EEZs, and provided for strict, unlimited, joint and several liability of the producer/s of waste. Significantly, it made remedies available to NGOs not having suffered direct damage, and envisaged the possibility of an additional European fund to cover instances when the liable party cannot provide full compensation or cannot be identified.

This project was, nonetheless, abandoned for a more comprehensive liability instrument, according to the Fifth Environmental Action Programme, which refers to the need for establishing a mechanism for restoring environmental damage in implementation of the 'polluter pays' principle. To this effect, a 'Green Paper' on remedying environmental damage was produced,¹⁴⁸ recently followed by a 'White Paper'.¹⁴⁹ Therein, it is envisaged that an integrated compensation system which would combine liability rules with a joint compensation mechanism through which certain damages would be shared within the economic sector more closely connected to the source of damage.¹⁵⁰ Forthcoming Community action is expected to harmonise Member States laws - which at the moment vary considerably - beyond the minimum provided for in the 1993 Dangerous Activities Convention and lay down detailed rules on issues such as the definition of environmental damage, means of redress, and legal standing.¹⁵¹ The future Community regime is proposed to include coverage of both environmental damage (site contamination and loss of biodiversity) and traditional damage (harm to health and property); and a strictly-defined scope of application linked with Community legislation. More specifically, it is proposed that contaminated sites and traditional damage be covered only if caused by a Community-regulated hazardous activity, while damage to biodiversity, only if protected under the Natura 2000 network. Liability would be strict when caused by inherently dangerous activities and fault-based when it involves damage to biodiversity caused by non-dangerous activities. The operator of the activity would be the liable party. There are different options regarding the form of the envisaged regime, with a Community Directive thought to be the most coherent.

¹⁴⁷ COM(89) 282 final - SYN 217, 1989 *O.J.* (C 251) 3; amended in COM(91) 219 final - SYN 217, 1991 *O.J.* (C 192) 6.

¹⁴⁸ COM(93) 47 final, 14 May 1993.

¹⁴⁹ See EC Commission, White Paper on Environmental Liability, COM(2000) 66 final, 9 February 2000.

¹⁵⁰ See H.Bocken, 'Financial Guarantees for Environmental Liability. Alternatives to Liability Insurance', 27(4) *Env't Pol. & L.*, 1997, esp. at pp.315-7.

¹⁵¹ See Bianchi, *op.cit.* n.103, pp.32-41; and Sands, *op.cit.* n.52, p.670. Cf. L.Krämer, *E.C.Environmental Law*, 4th ed., 2000, p.123.

4.2.5. The Assessment of Compensable Pollution Damage.

Arguably, the single most important element in the concept of civil liability for pollution damage is the scope and content of the definition of damage itself, and especially the extent to which pure environmental loss is covered. Providing coverage for such a loss might open the way for the transformation of civil liability into a more valuable tool of indirect enforcement of international environmental obligations. This is because it would signify a move away from the traditional notions of property damage and financial loss, and would, thus, allow for a considerable widening of the circle of persons that could raise a valid claim of compensation. Local authorities and NGOs in particular would be conceivably in a position to take action against polluters - substituting to some extent for insufficient state action, not only in cases of accidents that produce major damage, but also in instances where long-term and cumulative pollution impairs the environment, as does, for instance, land-based pollution of the sea. This would significantly advance the emerging trend of international civil liability regimes to address much more important, although less obvious, damage caused by day-to-day polluting activities, as illustrated in the 1993 Dangerous Activities Convention, which would in turn considerably extend the preventive and compliance-inducing role of civil liability standards.

It is, hence, worthwhile to proceed to a closer examination of the notion of compensable pollution damage, in relation specifically to the marine environment, and especially oil pollution, where most of the relevant developments are taking place.

5.2.4.1. General Considerations.

In instances when the marine environment has been substantially polluted, there are various types of damages possible to have occurred which should in principle be compensated in order to restore the pre-existing situation. First, there might be monetary damages, either expenses actually incurred or lost profits. The former are the easiest to prove and receive reparation for, and usually involve clean-up costs. In this connection, the actual course of action that a state takes when faced with an emergency of this sort cannot be normally challenged before a court. A decision, for example, not to use chemical dispersants in shallow waters, in order to avoid harm to ecosystems, which increases the degree of pollution of the coasts, should not in principle lead to a reduction of the damages to be awarded, as long as the expenses involved are reasonable.¹⁵²

In several cases, there are also perturbations of an economic nature that involve loss of profits as a result of a pollution incident. This can be expressed in general terms as the difference between the normal results that would have come about in the absence of the extraordinary event and the actual results. This difference - and consequently the outcome in terms of money awarded - depends on the period after which the situation returns back to normal and the method of

¹⁵² See F.Bonnieux & P.Rainelli, *Catastrophe Écologique et Dommages Économiques - Problèmes d'Évaluation à Partir de l'Amoco-Cadiz*, 1991, pp.191-2.

evaluation.¹⁵³ The question where the line should be drawn, between claims which are admissible and those which are too remote, has always been a fertile source of argument. In common law jurisdictions, a distinction has been drawn between cases where financial loss is sustained as a result of physical loss or damage to property owned by the claimant, and those where the claimant suffers only 'pure economic loss'.¹⁵⁴

Mainstream opinion maintains that it is not right to compensate all claims, however remote or indirect, merely because they can be causally attributed to the incident.¹⁵⁵ Tourism and fishing industries are widely accepted as legitimate claimants of lost profits. Nevertheless, the chain reaction that a grave pollution incident triggers may extend beyond these sectors; it is, for example, a controversial issue whether compensation should be paid not only to fishermen who lose earnings from reduced catches of wild fish, but also to seafood processing companies who purchase the fish from the fishermen. It is feared that if such claims were to be generally accepted, then this could all too readily lead to further extensions of the concept of 'pollution damage', to include still remoter parties such as wholesalers who buy the processed food, and ultimately retail suppliers or restaurateurs. Similar extensions may also be anticipated in the tourist industry, in which claims have already been attempted for reduced earnings due to 'loss of image' allegedly affecting an entire region, including areas which are geographically remote from the polluted location.¹⁵⁶

Secondly, there can arise non-monetary damages, such as losses due to 'opportunity costs', which refers to the value of material goods, e.g. staff and financial resources that would normally have been put to a more productive use, and might in practice involve remuneration for the salaries of the employees mobilised, including overtime and transportation costs.¹⁵⁷ Non-monetary damages stem also from reduction of amenities, i.e. nuisances suffered by the local population in their everyday life, such as oil smell or equipment traffic or the unavailability of the public services that are devoted to the decontamination battle, or even reduction of the enjoyment - both passive and active - that the areas affected can offer, like seaside recreational activities or fishing. Here, we clearly pass to the realm of non-commercial values and the degree of speculation when trying to translate them into a monetary award is a significant obstacle.

Finally, 'pure ecologic loss' can give rise to non-monetary damages, and has indeed been used as grounds for claims either requesting compensation for the actual marine biomass lost, or for

¹⁵³ For a different approach to those issues in the *Amoco Cadiz* case that would have benefited the victims more than the Court's adopted strategy, see *ibid.* pp.192-4.

¹⁵⁴ See e.g. *Robins Dry Dock & Repair Co. v. Flint* Case, 275 US 303, 1927; and the more recent UK case of *Murphy v. Brentwood District Council*, *W.L.R.*, 1990/3, p.414.

¹⁵⁵ See CMI Working Group, 'CMI Colloquium on Environmental Damage Assessment: Discussion Paper', in de la Rue (ed.), *op.cit.* n.116, pp.256-7.

¹⁵⁶ See, e.g. the *Caltex Oil (Australia) Pty.Ltd. v. The Dredge 'Willemstad'* Case, 136 *C.L.R.*, 1976, p.529.

¹⁵⁷ Usually the 'opportunity cost' is treated solely from the aspect of the value of the alternative sacrificed when there is a loss of profit, see Bonnicux & Rainelli, *op.cit.* n.152, pp.194-5.

its restoration.¹⁵⁸ Evaluation of the damaged ecosystems again involves speculative techniques. What is more, until recently the dominant notion has been that wildlife and ecosystems are 'res nullius' and thus cannot give rise to a claim based on property concepts. Considerable difficulties of a philosophical, legal and practical nature are also involved in evaluating damage to water areas, when it comes to the cost of restoration not yet undertaken or compensation of irreparable natural resources. But placing a monetary value on natural objects, including living animals, aesthetic views, and water purity, may be essential if one is to fully protect natural resources.

Now, there are at least two problems in defining a measure for natural resource damage, i.e. what to measure, and how to measure it.¹⁵⁹ Despite the fact that different methods have been developed for evaluating environmental damage, they have been criticised as too inaccurate, stereotyped and arbitrary. These approaches do seem to have methodological shortcomings and they do not take into sufficient account differences in environmental damage situations, e.g. the migrations of sea animals, impacts on reproductive cycles, the long-term effect of sunken oil on the ecosystem itself etc. Nonetheless, it is possible that lawyers, economists, scientists etc. will be able to develop more rational and accurate methods of evaluation in the future.¹⁶⁰ In this connection, it is also important that methods of quantifying environmental harm be accepted at the international level so that the claimants do not get different treatment depending on national approaches.

Let us now examine the only international civil liability regime that has, in real life, grappled with the issue of compensable pollution damage, i.e. that of oil liability.

4.2.4.2. The Operation of the CLC and the Fund Convention with regard to Compensable Pollution Damage.

As early as 1975 Lance D. Wood observed that the 'social value' of the CLC and Fund Convention largely depends on the meaning to be given to the vague terms 'damage', 'loss', and 'contamination' in their definition of 'pollution damage', which will ultimately judge whether the objective of making the oil transportation and distribution industries will "pay for all oil production costs as fully as is practicable".¹⁶¹

In fact, over the years the Fund developed certain principles governing the admissibility of claims. The Assembly and the Executive Committee have taken a number of decisions in this regard; relevant principles have also been developed during negotiations of the Director with claimants. The compensation policy developed by the Fund administrators involves damages to property, such as fishing gear, beaches etc., either destroyed or in need of clean-up; economic losses suffered by those depending directly on earnings from coastal or sea-related activity, e.g. fishermen,

¹⁵⁸ See *infra*, pp.172 and 174-7.

¹⁵⁹ See Wetterstein, *op.cit.* n.133, pp.238-40.

¹⁶⁰ See also *infra*, at fn.181.

¹⁶¹ L.D. Wood, 'Requiring Polluters to Pay for Aquatic Natural Resources Destroyed by Oil Pollution', 8 *Nat. Res. Lawyer*, 1975, p.573.

seaside hoteliers etc.; and expenses for clean-up operations at sea or on the coast, together with reasonable preventive measures aiming at minimising pollution damage, and "reasonable measures of reinstatement" of the environment, significantly excluding 'pure ecological loss'.¹⁶²

The particular elements of compensable damage, according to the Fund's practice are costs of clean-up operations; salvage operations; damage to property; and some damage to the environment.

More specifically, most legal systems will recognise that money spent on measures to prevent or minimise the effect of oil pollution should be recoverable. However, the definition of 'preventive measures' would appear not to apply to what has been called 'pure threat removal measures', i.e. measures which are so successful that there is no actual spill of oil from the tanker at all. Accordingly, the Fund has in the past taken the position that if a spill occurs, only damage caused or costs of measures taken after the spill are compensable, and consequently costs of so-called pre-spill measures are not compensated. This has now changed after the entry into force of the 1984/1992 amendments, whereby relevant expenses will be recoverable even when no spill occurs, provided that there was a "grave and imminent danger" of pollution damage. In any case, if a tanker is damaged and oil is spilt, the costs of measures to prevent more oil from escaping into the sea are regarded as being, in principle, compensable to the extent they will be deemed 'reasonable'.¹⁶³

As far as salvage operations are concerned, averting or minimising a pollution incident and thereby reducing the liability of the vessel has not been a 'cure' recognised by the traditional law of salvage. In other words, if the salvage operation was not successful in terms of saving tangible property, the salvor was entitled to no remuneration, the so-called 'no cure, no pay' principle.¹⁶⁴ This was obviously a blatantly outdated approach which IMO tried to rectify by giving environmental protection incentives to salvors through the 1989 International Convention on Salvage.¹⁶⁵ Pursuant to it, the salvor must carry out salvage operations with 'due care' to, *inter alia*, prevent or minimise damage to the environment. Despite the fact that the 'no cure, no pay' principle is upheld, the salvor

¹⁶² In the same vein as in the *Commonwealth of Puerto Rico v. the S.S. Zoe Colocotroni* Case, (US Court of Appeals, 1st Cir.1980), 628 F.2d 652.

¹⁶³ It should also be noted that in several cases the question has arisen as to the admissibility of claims from a government or from other public bodies relating to certain costs which would have arisen even if the incident had not occurred, i.e. 'fixed costs' as opposed to 'additional costs', i.e. expenses incurred by the public authorities as a result of the incident and which would have not arisen had the incident and the operations relating to it not taken place, e.g. extra costs for overtime and other allowances to the personnel (what was referred to above as 'opportunity costs'), see Jacobsson, *op.cit.* n.120, pp.49-51; CMI Colloquium, *op.cit.* n.155, p.252-3; and the decision in *Maritime Services Board of New South Wales v. Posiden Navigation Inc (The Stolt Sheaf and the World Encouragement)*, 1 N.S.W.L.R., 1982, p.72. The Fund has adopted a position whereby only those expenses which relate closely to the clean-up period in question and which do not include general administrative costs or remote overhead charges should be compensated, see B.Browne, 'Oil Pollution Damage Compensation under the Civil Liability Convention 1969', in S.A.M.McLean (ed.), *Compensation for Damage - An International Perspective*, 1993, p.150. .

¹⁶⁴ See generally, D.W.Steel & F.D.Rose (eds.), *Kennedy's Law of Salvage*, 1985.

¹⁶⁵ See C.Redgwell, 'The Greening of Salvage Law', 14(2) *Mar.Pol.*, 1990, pp.142-50.

is in any case entitled to a special compensation equivalent to his expenses. Successful pollution prevention operations reward the salvor with increased special compensation, whereas negligence in respect to environmental protection deprive him of it.

As far as the Fund's practice is concerned, broadly speaking, the cost of salvage operations is regarded as pollution damage if their primary purpose is to prevent or minimise such damage. Usually this is not the case; in most instances, the prime objective of salvage is to protect the ship or cargo concerned. This often narrow distinction has given rise to disagreement. An example of such a dispute arose out of the collision between the Greek tanker *Patmos* and the Spanish tanker *Castillo de Montearagon* off the coast of Calabria, Italy.¹⁶⁶

In some recent incidents, on the other hand, it has been established that salvage operations had dual purposes, both to prevent and minimise pollution and to save the vessel and cargo.¹⁶⁷ It then became necessary to consider how the costs for these operations should be distributed between salvage and pollution prevention, and, in this connection, the Executive Committee has taken the view that such distribution would have to be made on the basis of an assessment of the facts of every individual case.

When damage to property is at issue, most jurisdictions recognise the principle of *restitutio in integrum* or compensation for the reduction in value or for the necessary costs of repair. The same can be said of consequential losses suffered by owners or users of property that has been contaminated or damaged.¹⁶⁸ Thus, for example the fisherman whose fishing gear has been damaged by pollution may lose earnings during the time he is prevented from fishing, pending the cleaning of his nets or the purchase of new equipment. Generally speaking, most systems of law will compensate the fisherman for his loss of earnings.¹⁶⁹

But when it comes to 'pure economic loss', relevant claims are regarded by the Fund as being recoverable only by claimants who depend directly on earnings from sea related or coastal activities. For example, loss of earnings suffered by fishermen, hoteliers and restaurateurs at seaside resorts would be recoverable, but losses suffered indirectly would not be so; by the same token, loss of tax revenues by municipal authorities would not.

In the 1984/1992 negotiations, a provision was put forward to the effect that no particular significance should be attached to the fact that it is not expressly required that the loss be a direct

¹⁶⁶ Twelve claims totalling 18.3 million pounds related to salvage operations and related measures, and as such the Fund resisted them. As a result of that, two of the claims were withdrawn, but the others became the subject of proceedings in the court of Messina in 1986. In its judgment, the Court made a general statement to the effect that salvage operations could not be considered as preventive measures, since the primary purpose of such operations was that of rescuing ship and cargo; this applied even if the operations had the further effect of preventing pollution. On the basis of this principle, the claims were either rejected in full or substantially reduced by the court, see Browne, *op.cit.* n.159, p.151. On the other important aspects of the *Patmos* Case, see *infra*, pp.174-7.

¹⁶⁷ See Jacobsson, *op.cit.* n.120, p.51.

¹⁶⁸ See Browne, *op.cit.* n.163.

¹⁶⁹ See also *supra*, p.168.

result of the impairment,¹⁷⁰ but this formula was dropped from the final text. This was not because of a wish to widen the definition, but because it was clear that this phrase would probably have a different significance in different legal systems. It was expected, instead, that national courts would develop their own criteria for placing reasonable limits on the scope of recoverable claims for economic loss.

The Fund does not normally accept claims by governments for damage to the environment as such, on the grounds that they are unquantifiable. In other words, the Fund has persistently denied compensation for environmental damage when quantified *in abstracto* in accordance with theoretical models, as it has been requested, e.g. by Soviet and Italian courts.¹⁷¹

Unfortunately, the texts, as well as the *travaux préparatoires*, of the CLC and Fund Conventions did not clarify the precise purport of 'pollution damage'. The problem was actually discussed during the CLC Conference, but the question concerning compensation for ecological damage was not tackled;¹⁷² whereas in the course of preparation for the Fund Convention, the problem of compensation for damage to living and non-living resources was considered, but not the question of ecological damage as such.¹⁷³

As a matter of fact, the problem of compensation for damage to the marine environment was put before the Fund for the first time after the *Antonio Gramsci* incident in 1979. In that case, the government of the USSR had lodged with the Soviet courts a claim of an abstract nature for compensation for ecological damage. The amount claimed had been calculated in conformity with a mathematical formula contained in a USSR statute at a rate of 2 roubles per cubic metre of polluted water estimated according to the quantity of oil spilt.¹⁷⁴ After its Resolution, the Fund Assembly set up a Working Group to examine whether the claim was admissible under the CLC and Fund Conventions. It concluded that compensation could be granted only if a claimant who has a legal right to a claim under national law had suffered 'quantifiable economic loss'.¹⁷⁵ This opinion was confirmed by the Assembly in 1981 and the Executive Committee in 1988.

In fact the 1984/1992 amendments formally uphold the Fund's stance, and define 'pollution damage' in Article 2(6) as:

"(a) loss or damage caused outside the ship by contamination resulting from the escape or discharge of oil from the ship, wherever such escape or discharge may occur, provided that compensation for impairment of the environment other than loss of profit from such

¹⁷⁰ See CMI Working Group, *op.cit.* n.155, p.257.

¹⁷¹ See Rémond-Gouilloud, *op.cit.* n.131, pp.92-3.

¹⁷² See M.C.Maffei, 'The Compensation for Ecological Damage in the 'Patmos' Case', in Francioni & Scovazzi (eds.), *op.cit.* n.2, p.388.

¹⁷³ *Id.*

¹⁷⁴ For details of the USSR legislation which is still applicable in the Russian Federation, see A.Kolodkin *et al.*, 'Some New Trends in Legislation of the Russian Federation and its Attitude towards Conventions with Regard to Marine Pollution', in de la Rue (eds.), *op.cit.* n.116, pp.33-8.

¹⁷⁵ See IOPC Fund, 1988 *Annual Report*, pp.61-2.

impairment shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken;
 (b) the costs of preventive measures and further loss or damage caused by preventive measures.”

That clearly means that not all ecological damage is repaired. Moreover, paradoxes are likely to occur, e.g. as Maffei points out, non-commercial species unique to the damaged area and which cannot be replaced if they become extinct do not fall within the purview of the liability regime; but if the species is not so rare and can be replaced, what is admittedly a ‘lesser damage’ than the previous one, then it is compensated for by means of ‘restoration costs’.¹⁷⁶

A study of the incidents that has provoked claims to the Fund up to the end of 1995 shows that in the overwhelming majority what is agreed and paid by the Fund concerns clean-up costs and less often damage to fisheries,¹⁷⁷ from the eighty-two cases, only in one is there a small amount of money given in compensation for what was described as ‘pollution damage’, that is 6,250 Swedish Kronas to the Swedish Government for pollution caused by the USSR tanker *Volgoneft 263*.

The Fund’s attitude is indicative of the actual constraints and limits of a compensation system which has not developed a consistent methodology of evaluation that would permit quantification of the environmental asset *per se* or of lost use values with the ensuing requirement to give standing to a broad range of actors;¹⁷⁸ and arguably of any such system purporting to rectify environmental damage *ex post facto*.

At the end of the day, and despite the Fund’s consistent practice, it will come to national courts to decide which losses are compensated and to what extent, should a conflict of interpretation arise. On this point, legal practice varies greatly from country to country.¹⁷⁹ National courts will have to establish criteria in order to arrive at a reasonable delimitation of the right to compensation for loss of profit. Moreover, since a successful claim for pure economic losses under national law generally seems to presuppose that an individual defined right has been infringed, national courts will have to decide to what extent such compensation is awarded when the right is exercised on a public basis, as is the case with reduction of amenities like recreational fishing, use of beaches etc.¹⁸⁰

All said, what is really interesting is that governments do not seem to actually claim compensation for environmental damage that often. Clearly, there are exceptions to this rule, most notably in Italy, where both the Administration and the Judiciary seem to persistently favour compensation for pure ecologic loss, as will be shown in the next Section. Some recent relevant cases may have some influence on the future interpretation of the Conventions by other national

¹⁷⁶ Maffei, *op.cit.* n.172, p.390.

¹⁷⁷ See IOPC Fund, *op.cit.* n.118, pp.122-37.

¹⁷⁸ See Wetterstein, *op.cit.* n.133, p.246.

¹⁷⁹ For the Italian practice, see *infra*, pp.174-7.

¹⁸⁰ See Wetterstein, *op.cit.* n.133, p.236.

courts, and consequently present a special interest. It must be noted here that the US is leading in the effort to assess pure environmental damage so as to make it susceptible to compensation, especially after the *Exxon Valdez* incident.¹⁸¹ On the contrary, Mediterranean countries, with the exception of Italy, do not seem to share the same concerns;¹⁸² in fact, Spain, Greece, France, and Algeria, which are the only other countries in the region that had submitted claims to the Fund by the end of 1995,¹⁸³ are totally in line with the latter's policy.¹⁸⁴

4.2.4.3. The Attitude of the Italian Administration and Courts towards Compensable Pollution Damage: A Case Study.

Two major oil pollution incidents, involving the tankers *Patmos* and *Haven*,¹⁸⁵ have so far been the object of heated controversy between Italy and the Fund on the question of the nature of environmental harm that is susceptible to compensation. Nonetheless, it would be safe to assume that the friction will continue, as the Italian government has reserved its position in connection with environmental damage caused by the *Agip Abruzzo*, until investigation into the effects of the spill it caused has been completed.¹⁸⁶

Following collision of the Greek tanker *Patmos* with the Spanish tanker *Castillo de Montearagon* in the Strait of Messina in 1985, the Italian Ministry of Merchant Marine lodged a claim of Lit 5 billion for ecological damage, based on a broad interpretation of the relevant Articles of the CLC.¹⁸⁷ In its 1986 decision, the competent Tribunal of Messina rejected the Ministry's approach and gave a restrictive interpretation of relevant provisions: It held that Article II of the CLC refers to "damage caused on the territory" and not "to the territory" meaning that compensation was due for damage to *things which lie on the territory* or the territorial sea and not for damage to

¹⁸¹ See among others, C.Cartwright, 'Natural Resource Damage Assessment: The Exxon Valdez Oil Spill and its Implications', 17 *Rutgers Computer & Technology L.J.*, 1991, pp.451-494; C.B.Kende, 'Liability for Pollution Damage and Legal Assessment of Damage to the Marine Environment', 11(2) *J. of Energy & Nat.Res.L.*, 1993, pp.105-20; C.M.Augustyniak, 'The Economic Valuation of Services Provided by Natural Resources: Putting a Price on the 'Priceless'', 45 *Baylor L.Rev.*, 1993, pp.389-403; S.A.Austin, 'The National Oceanic and Atmospheric Administration's Proposed Rules for Natural Resource Damage Assessment under the Oil Pollution Act', 18 *Harv.Env't L.Rev.*, 1994, pp.549-61; S.W.Smithson, 'The Department of the Interior should Incorporate Current Water Body Modeling Techniques in the Natural Resource Damage Assessment Model for Coastal and Marine Environments', 20 *Rutgers Computer & Technology L.J.*, 1994, pp.701-723; and Kasoulides, *op.cit.* n.15, pp.521-2. See also *State of Ohio v. The US Department of the Interior* (D.C.Cir.1989), 880 *F.2d* 432.

¹⁸² At the beginning of 1996, all Mediterranean countries, except Israel, Lebanon, Libya, and Turkey, were Parties to the Fund Convention, while Egypt was under observer status, see IOPC Fund, *op.cit.* n.116, pp.12-3.

¹⁸³ It would be fair to note in this context that very few tanker accidents occurring in the Mediterranean - five by the end of 1995 - seem to have involved damages calling for the operation of the Fund, the overwhelming majority of such incidents happening in the seas of Japan and Korea, see *ibid.*, pp.122-37.

¹⁸⁴ See, e.g., the Spain claims arising from the *Aegean Sea* incident, *ibid.*, pp.56-8; the Greek claims arising from the *Iliad* incident, *ibid.*, p.75; the Algerian claims concerning the *Oued Gueterini* incident, *ibid.*, pp.126-71 and the French claims arising from the *Haven* incident, IOPC Fund, *Annual Report 1994*, p.51.

¹⁸⁵ See generally, Maffei, *op.cit.* n.172, pp.381-94; and A.Bianchi, 'Harm to the Environment in Italian Practice: The Interaction of International Law and Domestic Law', in P.Wetterstein (ed.), *Harm to the Environment: The Right to Compensation and Assessment of Damages*, 1997, pp.103-29.

¹⁸⁶ See IOPC Fund, *op.cit.* n.118, p.41.

¹⁸⁷ Note that citizen suits to recover ecological damage are not allowed in Italy, but local authorities do have standing in such cases, see Bianchi, *op.cit.* n.185, pp.106-7.

the territory or the territorial sea as such. Furthermore, it was held that only real rights over property can be violated by private persons, and since the territorial sea is not state-owned property but rather an area where the state exercises sovereign rights - and the same applies *mutatis mutandis* to the marine flora and fauna -, damage to it could not be compensated to the Ministry.

That decision was expectedly appealed against by the Italian government, which took the position that its claim relates to actual damage to the marine environment and to actual economic loss suffered by the tourist industry and fishermen. For this reason, it maintained that the claim was not in contravention of the interpretation of the definition of pollution damage adopted by the Fund Assembly. The Fund Executive Committee rejected the Italian arguments and maintained that compensation for economic loss suffered by the tourist industry and fishermen could only be claimed by the individual persons having suffered the damage who, in addition, had to prove the amount of the economic loss sustained.¹⁸⁸

The Court interpreted the CLC in the light of the 1969 International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, Article 1, which allows Parties to "take such measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil, following upon a maritime casualty...". Article 2(4) of the same Convention defines 'related interests' as "the interests of a coastal state directly affected or threatened by the maritime casualty, such as: (a) maritime coastal, port or estuarine activities, constituting an essential means of livelihood for the persons concerned; (b) tourist attractions of the area concerned; (c) the health of the coastal population and the well-being of the area concerned, including conservation of living marine resources and of wildlife". Accordingly, the CLC definition of pollution damage was thought to be wide enough to include damage to the coast and related interests, including those concerning environmental values. Why the Court felt compelled to resort to the Intervention Convention is not clear, and its whole reasoning has led to some substantial criticism.¹⁸⁹

Furthermore, the Court noted that the problem of ecological damage has an economic character even if it does not correspond to an arithmetical concept; it consists in the economic importance that destruction, degradation, or alteration of the environment has *per se* and also vis-à-vis the community which gets benefit out of the environmental resources and out of the sea, such as food, tourism, health, scientific and biological research.¹⁹⁰ It follows that the state has to protect this benefit. The court said that

¹⁸⁸ See IOPC Fund, *op.cit.* n.125, p.35.

¹⁸⁹ See Maffei, *op.cit.* n.172, p.387-8; and Bianchi, *op.cit.* n.185, pp.116-8.

¹⁹⁰ It must be noted that the 1980 Resolution of the Assembly was referred to by the Tribunal of Messina to support its findings; on the contrary, the Court of Appeal ignored it, although it constituted 'authoritative interpretation' of the Convention coming from its supreme organ, see 1969 Vienna Convention on the Law of Treaties, Art.31(3).

“The environment must be considered as a unitary asset,... including natural resources, health and landscape. the damage to the environment prejudices immaterial values, which cannot be assessed in monetary terms according to market prices, and consists of the reduced possibility of using the environment. The damage can be compensated on an equitable basis, which may be established by the courts on the grounds of an opinion of experts....”

Moreover, the state representing the national community and protecting its interests was given standing to sue; this importantly meant that the government's claim was grounded neither on the costs incurred for restoration nor on any other economic loss suffered by the state as such.

The Court did in fact appoint experts to calculate the environmental damage suffered; but in 1990 they concluded that, except for fishing activities, there was lack of data to evaluate damage, and that it was for the court to make the evaluation. The experts found that some fishermen were prevented from fishing for 15 days and that this damage could be quantified at not less than Lit 1 billion. Their report was contested by the Fund, the owner of *Patmos* and the P & I Club arguing that the surveyors had exceeded their mandate, since the damage allegedly suffered by fishermen and the tourist industry was not damage to the marine resources but economic loss, and that, in any event, the experts had admitted that the damage to the tourist industry could not be quantified. They also referred to the fact that, as regards damage to the environment properly speaking, the experts had used expressions such as ‘non-existent’, ‘negligible’, ‘modest’, ‘of short duration’ and ‘reversible’.

The Court of Appeal did request clarifications from the experts, and in April 1992, a second report was produced, in which the experts stated that their conclusions were only hypothetical and not confirmed by factual evidence. The quantity of water affected by oil was estimated, and how the oil might affect the plankton and the development and growth of fish was then considered. A mathematical formula was used to calculate a quantity of fish which allegedly were not born or did not develop, due to lack of nutrition. The experts stated that only a percentage of the quantity of fish not having come into existence would have been caught and gave a nominal value to the relevant quantity. An allowance was also made for the days when fishing was banned following the incident, to take account of loss of earnings, while damage to the beaches was excluded because neither the authorities nor the tourist operators had submitted relevant claims.

The final judgment, issued in December 1993,¹⁹¹ awarded the Italian state Lit 2,100 million (£827,000) for damage to the marine environment. There was no indication in the judgment of how this sum was precisely calculated. However, it is clear that the Court reduced the amount claimed on the grounds of contributory negligence on the part of the Italian authorities, which had made improper use of detergents, and also because some of the polluted area lied outside Italian territorial

¹⁹¹ See Ministero de la Marina Mercantile e Ministero dell'Interno v. Patmos Shipping Co., The United Kingdom Steamship Co., and International Oil Pollution Fund (Court of Appeal of Messina, 1993), reprinted in 9 *Rivista Guiridica dell'Ambiente*, 1994, pp.683-94. For a summary of the decision, see IOPC Fund, *op.cit.* n.184, pp.38-9.

waters, and consequently could not give rise to a valid claim under the CLC. It appears that the Court assessed the amount of compensation on the basis of a certain quantity of fish which was not brought into existence as a result of pollution, and took also into account damage to plankton and benthos. It thus rejected the experts' view that only loss of fish which would have been caught should be considered, in view of the fact the claim related to environmental damage in terms of loss of enjoyment suffered by the collectivity. As a result of the amount awarded, which did not exceed the shipowner's limitation amount, the Fund was not called to make any payments, and thus was not entitled to appeal.

This issue of 'pure ecological loss' came again to the spotlight, after the *Haven* accident off Genoa in April 1991,¹⁹² which resulted in claims of £683 million for oil pollution damage launched in Italy, France, and Monaco. Of these £311 million (Lit 765 billion) were requested by the Italian Government in relation to environmental damage, and more specifically to restoration of an area of phanerogams (type of seed plants), and consequent beach erosion; wreck removal; atmospheric and marine damage restored by the natural biological recovery of the resources; and irreparable damages to the sea and atmosphere.

In view of the protracted legal proceedings, aggravated by problems of time-bar, the Fund entered into negotiations with the claimants with a view to arriving at a lump-sum settlement. From the amount of £56 million offered by the Fund, only an *ex gratia* payment of Lit 25 billion by the shipowner/UK Club was to go towards meeting claims of pure ecological damage. The Italian Government, however, was reluctant to accept the deal. This caused a very heated debate in the Fund's Assembly, some delegates going as far as suggesting that the Italian attitude with regard to environmental damage might have grave consequences for the future of the international oil compensation system as a whole; at the same time, the French were pressing for compensation to be paid to their claimants without waiting for an overall settlement.¹⁹³ All this pressure produced results only as late as 1998, when Italy announced its agreement to the overall settlement package.¹⁹⁴

The limitations in the types of damages covered by the international instruments and the Italian reasoning in the *Haven* case, raise a question as to what extent, if any, contracting states to the CLC may legislate for recovery of pollution claims outside the Conventions. As was already mentioned, where the CLC applies, compensation thereunder is to be the sole and exclusive remedy for claims in respect of pollution damage caused by the incident. But where claims are excluded from the scope of the Convention, difficulties may arise if this is interpreted as opening the door for alternative remedies under national laws outside the CLC. It appears, for example, that under general environmental laws both France and Italy allow some claims for non-pecuniary losses of a

¹⁹² For an account of the incident, the claims and the Fund's response, see, IOPC Fund, *op.cit.* n.118, pp.42-54.

¹⁹³ See *ibid.*, pp.52-4.

¹⁹⁴ See N.Gaskell, 'Developments in International Maritime Law', 28(3-4) *Env'l Pol. & L.*, 1998, p.166.

type which is not recognised in other contracting states, and which would not be admitted under the 1984/1992 Protocols.¹⁹⁵ It is feared that if claims of this nature were to be admitted against shipowners for oil pollution in addition to claims under the CLC, the uniformity of laws which the Conventions were designed to achieve would be undermined. The difficulties would be compounded by the fact that such claims would fall outside the shipowner's limit of liability, and would therefore impose an additional burden on top of his limitation fund. This leads some authors to argue that it should be established that the CLC provides an exclusive remedy for all claims for oil pollution from ships, and the sole basis for determining the admissibility or otherwise of claims in Contracting states.¹⁹⁶ However, such a development would hinder the possibility of a progressive evolution of the notion of compensable pollution damage and would bar the widening of the circle of persons with standing to raise relevant claims.

4.3. Concluding Remarks.

The preceding discussion revealed a multiplicity of shortcomings in the state responsibility approach to control over compliance with international environmental obligations,¹⁹⁷ and in the civil liability regimes as they stand. To sum them up, the state responsibility mechanism has an inherently reactive, bilateral and confrontational character,¹⁹⁸ that does not fit well in the modern co-operative environment of international environmental regulation. It can be used if and when a major dispute between two or more states arises, more likely involving transboundary damage, and cannot serve the purpose of monitoring and encouraging compliance with international environmental standards on a continuous basis. Moreover, there are considerable difficulties in proving breach of obligation, especially when the behaviour prescribed by international law is not unequivocal, such as the standard of care - 'due diligence' or 'strict liability' - that is required; in establishing the causal link between specific activities and environmental impairment and evaluating the latter, bearing in mind that pure ecological costs and systemic damages have not been addressed by traditional state responsibility principles; and in legally identifying the author of damage.¹⁹⁹ There are additional restrictions with regard to standing; even if a broad definition of 'injured' states is accepted and obligations *erga omnes* in the environmental sphere are endorsed, state responsibility remains a strictly inter-state affair and firmly excludes individuals and their associations from the circle of

¹⁹⁵ See CMI Working Group, *op.cit.* n.155, p.260. See also Sands, *op.cit.* n.52, pp.670-1, on the possibility of applying a future liability instrument adopted at Community level to damage not covered by the international Conventions.

¹⁹⁶ See CMI Working Group, *op.cit.* n.155, p.260.

¹⁹⁷ See also *supra*, Chapter 3, at fn.161.

¹⁹⁸ See C.Tinker, 'State Responsibility and the Precautionary Principle', in D.Freestone & E.Hey (eds.), *The Precautionary Principle and International Law - The Challenge of Implementation*, 1996, pp.53-71; and P.Birnie & A.Boyle, *International Law and the Environment*, 1992, p.136.

¹⁹⁹ See Kiss & Shelton, *op.cit.* n.6, pp.350-60; and Wolfrum, *op.cit.* n.90, pp.77-109..

actors empowered to control compliance with international standards. All these flaws make this approach blatantly ineffective as a means of enforcing international law on marine pollution, in particular from land-based sources, in case no transboundary harm can be invoked.

That said, the practical and theoretical obstacles to successfully pursuing a state responsibility claim also partially account for the absence of state practice, notably in the Mediterranean context; however, they are not unsurmountable.²⁰⁰ More important is the political consideration, what Dupuy calls “un sentiment diffus de solidarité” among the ‘internationale des pollueurs’,²⁰¹ which has led to very limited use of this approach in the environmental domain, even in cases where all the necessary elements existed.²⁰² This is best illustrated by the attitude of states when faced with major pollution incidents with undeniable transboundary impact, such as the Chernobyl, Bhopal and Sandoz cases, and a large number of major oil spills.²⁰³ It is notable that most commentators agree that in both the Chernobyl and Sandoz cases breaches of international treaty obligations had actually been committed.²⁰⁴ Only in the context of nuclear pollution is there some practice of invoking state responsibility even today,²⁰⁵ but only when this kind pollution is consciously caused by nuclear tests, the legality of which is a matter of intense international controversy which creates the necessary adversary climate.

Hence, it is not surprising that the ILC's attempts to develop and reform the law of state responsibility have not been a success up to now. Similarly, UNEP's efforts to develop respective rules in an environmental context as was foreseen in Principle 22 were faced with the reluctance of states and are in a stalemate. In this light, Kiss and Shelton's conclusion that “thus far it does not appear that states are willing to engage in the delicate process of defining the conditions and scope of international responsibility for environmental damage” seems entirely justified.²⁰⁶

²⁰⁰ See P.-M. Dupuy, ‘L'État et la Réparation des Dommages Catastrophiques’, in Francioni & Scovazzi, *op.cit.* n.2, pp.141-2

²⁰¹ See *ibid.*, pp.142-5, esp. at 142.

²⁰² Hence, some characterise international liability in the environmental sphere as a ‘stillborn regime’, see Developments..., *op.cit.* n.18, pp.1498-504.

²⁰³ See Kiss & Shelton, *op.cit.* n.6, pp.360-3; and Dupuy, *op.cit.* n.200, pp.128 and 134-41.

²⁰⁴ See, e.g., Dupuy, *op.cit.* n.201, pp.136-41; and H.U.J.d'Oliveira, ‘The Sandoz Blaze: The Damage and the Public and Private Liabilities’, in Francioni & Scovazzi, *op.cit.* n.2, pp.430-4. D'Oliveira notes that by following the course of private international law as opposed to the public one of state responsibility, the claims submitted were settled almost entirely within three years, pp.440-1. It has, however, also been suggested that the real difference between the fate of the two incidents lies rather in the political and diplomatic pressure exerted on Switzerland, as opposed to the leniency with which the Soviet Union was treated, see D.F. McClatchey, ‘Chernobyl and Sandoz One Decade Later: The Evolution of State Responsibility for International Disasters’, 25 *Georgia J. of Int'l & Comp.L.*, 1996, pp.659-80. For an account of the abortive international efforts to clarify state responsibility standards provoked by the Chernobyl accident, see M. Politi, ‘The Impact of the Chernobyl Accident on the States' Perception of International Responsibility for Nuclear Damage’, in Francioni & Scovazzi, *op.cit.* n.2, pp.473-99.

²⁰⁵ See the Nuclear Tests Cases, (*Interim Measures*), 1973 *I.C.J. Reports*, p.99; (*Jurisdiction*), 1974 *I.C.J. Reports*, p.253; and Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court's Judgment of 20 December 1974 in the Nuclear Tests (N.Zealand v. France) Case, 1995 *I.C.J. Reports*, p.288,

²⁰⁶ Kiss & Shelton, *op.cit.* n.6, p.362.

Then, what has been called 'soft responsibility' through 'moral pressure' exercised during operation of the permanent organs establish under multilateral treaties becomes increasingly important, as the usual concept of responsibility is "progressively dissolved" in a broader approach to environmental problems, namely a growing regional co-operation.²⁰⁷ It is indeed in this setting of follow-up effected in international environmental institutions established by treaties that the threat or use of counter-measures, this most traditional remedy for non-compliance, find some scope of fruitful application and potential evolution to better meet today's needs.²⁰⁸ These mechanisms of collective supervision will be discussed in detail in the next Chapter.

International civil liability schemes, on the other hand, despite their potentially deterrent function and the internalisation of costs and application of the 'polluter pays' principle they achieve, present their own important limitations. Their basic flaws consist in providing an *ex post* response, typically in relation to transboundary pollution damage, for a very limited range of activities, in practice only oil pollution accidents - and that with important qualifications. Exclusion of operational pollution and the practice of the IOPC Fund regarding the types of compensable harm, show that a substantial part of environmental damage remains uncompensated and thus indirectly undeterred.

In the specific context of MAP, the futile effort, since 1978, to develop a regional system of liability and to set up an Interstate Guarantee Fund does not leave much space for optimism. Nevertheless, it seems worthwhile to work on the idea of an agreement - or at least of participation in the regime established under the Dangerous Activities Convention - that would set uniform standards regarding liability for damage to the marine environment, applicable to all national legal orders, irrespectively of the existence of transnational elements in each particular case. In any case, such a proposal will probably have to wait until some norms are established at Community level, in view of the resistance of the Community to unreservedly commit to even some very basic relevant liability principles at the adoption of the Mediterranean Offshore Protocol.

All said, several jurists insist on the value and feasibility of developing the law on state responsibility and liability for marine pollution damage, land-based pollution included,²⁰⁹ and especially favour a regime of objective, strict responsibility,²¹⁰ albeit recognising the complex problems that such a development would present.²¹¹ In this connection, the 1990 Guidelines on

²⁰⁷ See Kiss, *op.cit.* n.2, pp.13-4.

²⁰⁸ See *infra*, Chapter 5, p.220-1; and Chapter 6, p.290.

²⁰⁹ See Q.Meng, *Land-Based Sources of Marine Pollution*, 1987, pp.234-5, calling for the development of international law on state responsibility for land-based marine pollution as a special branch of international law through special treaty-making.

²¹⁰ See Smith, *op.cit.* n.6, at Chapter 8, and Kasoulides, *op.cit.* n.15, pp.518-20, who advocates strict and unlimited liability in relation to certain specified and major breaches of dumping regulations.

²¹¹ See, B.Kwiatkowska, 'Marine Pollution from Land-Based Sources: Current Problems and Prospects' 14(3) *O.D.I.L.*, 1984, pp.329-30, where also other authors supporting the idea are cited; and R.M.M'Gonigle, "Developing (continued...)"

responsibility and liability regarding transboundary water pollution produced by an ECE Task Force show a trend to combine civil law liability systems with public international law of state responsibility, so as to achieve comprehensive protection of the environment and individual victims of pollution.²¹² In this vein, the definition of environmental damage - actual, potential, or merely threatened, which is designed to apply to both legal approaches, is one of the broader ever, as it covers 'detrimental changes in ecosystems' *not confined* to measures of restoration and reinstatement or equivalent reparation.

From a different perspective, the emphasis on developing national rules of liability under Principle 13 of the Rio Declaration, the on-going discussion at Community level for a civil liability instrument, proposals to establish interstate funds to compensate unidentifiable environmental damage, and the adoption of the 1993 Dangerous Activities Convention show a tendency to broaden the notion of transboundary damage and address liability for environmental harm within national borders. Together with the recent emergence of attitudes endorsing compensation for pure environmental loss (Italy), and the continuing development of relevant techniques within national legal systems (USA), they reinforce the trend - that will be more fully explored in Chapter 8 - towards establishing a comprehensive set of procedural standards that would enable citizens and NGOs to pursue control over compliance with international environmental law within state borders.

²¹¹(...continued)

Sustainability and the Emerging Norms of International Environmental Law: The Case of Land-Based Marine Pollution Control', XXVIII *Can. Y.B.I.L.*, 1990, pp.204-5.

²¹² Text in ECE, ENVWA/R.45, 20 November 1990, Annex; and see A.Rest, 'Ecological Damage in Public International Law', 22(1) *Env'l Pol. & L.*, 1992, pp.34-5.

Chapter 5.

***THE TRADITIONAL APPROACH TO NON-COMPLIANCE WITH
INTERNATIONAL ENVIRONMENTAL LAW: THE
COMPREHENSIVE INSTITUTIONAL MODEL.***

The present Chapter reviews the comprehensive institutional model adopted since the early 1970s in practically all environmental treaties, especially in connection to its compliance-control features and their development in the Mediterranean area. Separate discussion is devoted to the principal follow-up techniques used in this context, namely monitoring, reporting and co-operative supervision in the context of the Paris Memorandum of Understanding on Port State Control (Paris MOU). There follows an examination of two more advanced, and thus potentially more effective, non-compliance models, i.e. the 'non-compliance procedure' under the Montreal Protocol on Substances that Deplete the Ozone Layer, and the European Union mechanism, in order to highlight those elements that could be potentially extended or duplicated, thus enhancing the effectiveness of compliance control in the Mediterranean context.

5.1. The Follow-up Function of International Environmental Institutions.

In Chapter 3 we traced the evolution of institutional structures operating within environmental treaty regimes.¹ These organs provide permanent, flexible, non-confrontational and formalised *fora* that continuously refine and complement international standards, and develop procedures to supervise implementation and address relevant difficulties or even non-compliant behaviour. Expressing this general feeling, Agenda 21 (para.39.7) reads:

"The Parties to international agreements should consider procedures and mechanisms to promote and review the effective, full and prompt implementation. To that effect, States could, *inter alia*:

.....
(b) Consider appropriate ways in which relevant international bodies, such as UNEP, might contribute towards the further development of such mechanisms."

¹ See *supra* Chapter 3, pp.112-3, 115-6 and 122-3; and, among others, A.E.Boyle, 'Saving the World? Implementation and Enforcement of International Environmental Law through International Institutions', 3(2) *J. of Env'l Law*, 1991, pp.229-45; T.Gehring, 'International Environmental Regimes: Dynamic Sectoral Legal Systems', 1 *YB.I.E.L.*, pp.35-56; A.Kiss & D.Shelton, *International Environmental Law*, 1991, pp.56-7 and 98-101; and, more generally on the contemporary role of international organisations, A.Chayes & A.Handler Chayes, *The New Sovereignty - Compliance with International Regulatory Agreements*, 1995, pp.124-7 and Chapter 12. For an international political science perspective on the functions and effectiveness of these institutions, see, among others, O.R.Young, *International Cooperation - Building Regimes for Natural Resources and the Environment*, 1989; and P.M.Haas, R.O.Keohane & M.A.Levy (eds.), *Institutions for the Earth - Sources of Effective International Environmental Protection*, 1994. For early works along the same lines, see A.Thompson Feraru, 'Transnational Political Interests and the Global Environment', 28 *Int'l Org.*, 1974, pp.31-55; and L.Caldwell's *In Defence of Earth: International Protection of the Biosphere*, 1972.

The special role assigned to international organs is grounded on the dynamic character of modern environmental regimes,² which require a continuous process of review of their substantive provisions in the light of new scientific and technical findings,³ and close follow-up to improve compliance with their provisions in the light of updated assessments of their effectiveness in dealing with their subject-matter. Hence, under the comprehensive institutional model, the governing bodies of environmental treaties - whether these are the Meeting of Parties or *ad hoc* Commissions, being at the same time technical and political organs,⁴ become central in the operation of regimes that require much more than mere establishment of substantive regulation.

More specifically, law-making by such international institutions can contribute to facilitating treaty implementation,⁵ in view of the fact that ambiguity and indeterminacy of treaty language, as well as "the temporal dimension of the social, economic and political changes contemplated by regulatory treaties" - which accounts for 'framework' treaties and grace periods for compliance - are commonly blamed for non-compliance phenomena.⁶ Sachariew even goes as far as maintaining that "...the processes of applying and of making international environmental law become almost indistinguishable: assessment of compliance may well merge into legislative action to adjust... a standard or rule that has given rise to a compliance issue".⁷ What is more, procedural duties involving general and emergency co-operation for the protection of the marine environment operate purely at the international level,⁸ are extremely relative and subjective, and can be followed-up and 'enforced' only through effective action and peer pressure within the respective international structures.

That said, international organs typically also have research and exchange of information powers, and, most importantly, explicit supervisory authority, namely the power to develop specific compliance control and response mechanisms that go beyond the typical reporting and monitoring techniques that are commonly found in the actual treaty texts.⁹ Hence, in some instances, special committees are set up under environmental regimes with the specific mandate to supervise implementation of the legal obligations established under the respective instruments according to

² See Ghering, *op.cit.*, n.1, pp.35-56.

³ See *supra*, Chapter 2, pp.62-7.

⁴ See Ghering, *op.cit.* n.1, p.36.

⁵ See A.Handler Chayes, A.Chayes & R.B.Mitchell, 'Active Compliance Management in Environmental Treaties', in W.Lang (ed.), *Sustainable Development and International Law*, 1995, pp.84-8.

⁶ See Chayes & Chayes, *op.cit.* n.1, pp.9-17; Kiss & Shelton, *op.cit.* n.1, pp.98-9; and *supra*, Chapter 2, pp.58-9.

⁷ See K.Sachariew, 'Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms', 2 *Y.B.I.E.L.*, 1991, p.33.

⁸ See *supra*, Chapter 2, pp.86 *et seq.*

⁹ See W.Lang, 'Compliance Control in International Environmental Law: Institutional Necessities', 56(3) *Z.A.O.R.V.*, 1996, pp.687-9.

prescribed procedures.¹⁰

In Chapter 2 we discussed the general duty of institutional co-operation, as reflected in the LOSC provisions authorising regional elaboration of marine protection norms, and in general regional co-operation, especially in the case of semi-enclosed seas.¹¹ The Barcelona Convention and Protocols stipulations regarding co-operation in the formulation and adoption of protocols, and common programmes, measures and standards, have also been already examined.¹² The permanent institutional arrangements that facilitate this continuous interaction in the Mediterranean are laid down in Articles 17-20 and involve the establishment of several organs, namely a Secretariat, a Meeting of Contracting Parties, a Bureau, Standing Committees, and Regional Centres. The same pattern of a Secretariat combined with at least a periodic Meeting of Parties and other subsidiary organs is followed under the other applicable international instruments. Hence, the Marine Environment Protection Committee (MEPC) is the body responsible for the monitoring and updating MARPOL; the Consultative Meeting of the Parties administers the London Convention (Art.XIV); and the Basel Convention has a Conference of Parties (Art.16).

The case of the MEPC is a good illustration of how, even absent formal compliance-control provisions, follow-up work can be effected within appropriate institutions. Although there is no formal provision for a non-compliance procedure in MARPOL, the Marine Environment Protection Committee (MEPC), which moreover is the body responsible for the monitoring and updating of the Convention, acts as the *forum* where relevant pressure is exercised.¹³ MEPC has been preoccupied on several occasions with compliance questions, especially information thereon - or the lack of it - as furnished through the mandatory reporting procedure.¹⁴ But the more substantial bulk of its work involves elaboration of procedures and guidelines to improve and enhance effective control and inspection of vessels in order to ensure that they comply with international regulations for the protection of the marine environment.

Furthermore, in 1992 a Sub-Committee on Flag State Implementation (FSI) was established, with the main task of identifying necessary measures to ensure effective and consistent global implementation of IMO standards at the tripartite level - flag/port/coastal state - and making relevant proposals.¹⁵ It is important to note, however, that IMO's initial efforts were directed towards producing a well-focussed 'Flag State Compliance Committee', but these were diluted by states

¹⁰ See *infra*, pp.217-23.

¹¹ See *supra*, Chapter 2, pp.90-1.

¹² See *supra*, Chapter 2, pp.59-60.

¹³ There is substantial Mediterranean participation in the MEPC: The 1994 Thirty-fifth Session, for instance, was attended by fifty-nine countries, including Algeria, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Malta, Morocco, Spain and Tunisia.

¹⁴ See *infra*, pp.205-7.

¹⁵ See MEPC, Report of the Joint MSC/MEPC Working Group on Flag State Compliance, Annex I, reprinted in FSI 1/3/1, 23 December 1992, Annex, p.5.

representing powerful shipping interests, such as Liberia.¹⁶ Be that as it may, it seems that IMO countries have endorsed the necessity of such a standing *forum* and participate quite widely in its work; that said, Mediterranean participation is not equally impressive.¹⁷

More precisely, the FSI's objectives include: identification of the range of the flag state obligations emanating from IMO treaty instruments; assessment of the current level of implementation of IMO instruments; identification of those areas where flag states have difficulty in fully implementing IMO instruments; assessment of the problems in the involvement of the states party to the IMO instruments in their capacity as port states, coastal states and countries involved in training and certifying officers and crew; identification of the reasons for the difficulties; formulation of proposals to assist parties in implementing and complying with IMO instruments, these proposals to be implemented by the organ or by states; and monitoring of the performance of actions taken.

Already at its First Session, the FSI issued Draft Preliminary Guidelines to Assist Flag States,¹⁸ pursuant to which national administrations should improve the adequacy of measures taken to give effect to the conventions which they have ratified and ensure that they are effectively monitored;¹⁹ and Guidelines for the Authorization of Organisations Acting on Behalf of the Administration,²⁰ in order to promote uniformity of inspection and maintain high standards. Moreover, it has formulated a global strategy for port state control surveyors training, within the framework of each Memorandum of Understanding on Port State Control.²¹

All this amounts to an impressive and valuable effort at identifying the problem areas affecting implementation of international standards and recommending appropriate corrective action. However, it stops well short of an actual compliance-control mechanism that would pinpoint concrete breaches of international undertakings and proceed to a well-defined course of action to address these phenomena. Much more effective in this respect is the model of co-operative supervision by national port authorities, discussed in Section 5.2.3.

Let us now turn to the operation of the organs of the MAP system.

¹⁶ See XVI(20) *Oil Spill Intelligence Report*, 27 May 1993, p.4. It is equally true that this reality has provoked reactions; for instance, the Paris MOU PSCC publicly takes the view that the FSI should be more concerned with flag state difficulties and less with port state control, see Paris MOU, 1993 *Annual Report*, p.6.

¹⁷ For instance, the First Session was attended by 46 countries which included Algeria, Cyprus, France, Greece, Italy, Malta, Morocco, Spain and Syria; while the Second and Third had 54 and 50 participants respectively, including Cyprus, Egypt, France, Greece, Israel, Italy, Malta and Spain.

¹⁸ See FSI, Report to the Maritime Safety Committee and the Marine Environment Protection Committee, FSI 1/21, 18 May 1993, Annex 3, pp.2-4; endorsed as *Interim* Guidelines to Assist Flag States, in IMO Assembly Resolution A.740(18) and amended in A.847(20).

¹⁹ See also Chapter 8, at fn.13.

²⁰ See FSI, *op.cit.* n.18, Annex 2, pp.3 *et seq.* The Guidelines were endorsed in IMO Assembly Resolution A.739(18).

²¹ FSI, *op.cit.* n.18, Annex 10; and see *infra*, pp.212-7, on the Paris Memorandum of Understanding.

5.1.1. Institutions of the MAP System.

The institutional arrangements envisaged by the Barcelona Convention are straightforward, but at the time of their inception they were rather innovative, as they establish organs entrusted with the task of maintaining the conventional regime in actual operation for an indefinite period of time, as well as adapting it to the changing circumstances so as to better fulfill its objectives. These organs are the Secretariat, the Meeting of the Parties, the Bureau, Standing Committees, and a series of Regional Activity Centres.

UNEP, and in particular its Executive Director, is commissioned with secretariat functions, i.e. to convene and prepare the Meetings of Contracting Parties and future conferences; to transmit notifications, reports and information to the Parties; to receive, consider and reply to enquiries and information from the Parties, as well as NGOs and the public, when such requests relate to matters of common interest or activities carried out at the regional level; to regularly report to the Parties on the implementation of the Convention and Protocols; to perform the functions assigned to it by the Protocols, and such other functions as may be assigned to it by the Parties; and lastly to ensure the necessary coordination with other international bodies (Barcelona Convention, Art.17). In 1981, many of these functions were transferred to the Mediterranean Co-ordinating Unit for MAP (MEDU/MAP) located in Athens, which now acts as the *de facto* Secretariat and the overall coordinator of MAP and the Convention.²²

The Meeting of the Parties is the governing body of the legal regime, and is to hold ordinary sessions once every two years - eleven such meetings have taken place to date - and extraordinary ones whenever deemed necessary upon request of the Secretariat or of at least two Parties (Art.18(1)). Each Party has one vote (Rules of Procedure for Meetings and Conferences, Rule 42).²³ Unless otherwise provided, substantive decisions, recommendations and resolutions are adopted by a two thirds majority of the Parties present and voting (Rule 43), whereas procedural decisions are taken by simple majority (Rule 43). Voting is understood to come into play only when consensus cannot be reached;²⁴ it arguably is, then, the exception and not the rule, as can be proved by a quick examination of the frequency of voting during the Meetings of the Parties.

With the tacit agreement of two thirds of the Parties, non-parties, such as states members of the UN or its specialised agencies (Rule 6), the UN and its specialised agencies (Rule 7), any interested intergovernmental organisation (Rule 8(1.A)), and any international non-governmental

²² See UNEP, Report of the Second Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its related Protocols and Intergovernmental Review Meeting of Mediterranean Coastal States on the Action Plan, Cannes, 2-7 March 1981, UNEP/IG.23/11, 1981.

²³ As adopted and amended at Meetings of the Parties, see UNEP/IG.14/9, 1979, Annex VII; UNEP/IG.23/11, 1981, Annex VII; UNEP/IG.43/6, 1983, Annex XI; and UNEP(OCA)/MED IG.1/5, 1989, Annex V (3.5).

²⁴ See UNEP, Report of the Intergovernmental Review Meeting of Mediterranean Coastal States and First Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols, UNEP/IG.14/9, 1979, Annex IV, p.3.

organisation with a direct concern in the protection of the Mediterranean (Rule 8(1.B)) could acquire observer status, i.e. participate in Meetings without a right to vote and present any information or report relevant to the objectives of the Convention. At the 1995 revision of the Barcelona Convention, this has been formally endorsed in new Article 20.

Attendance at the Meetings is usually very high; with the exception of Libya and Lebanon, the rest of the countries practically never fail to send a delegation. It is also noteworthy that several NGOs observe every Meeting; for instance, the Ninth Meeting of the Parties was observed by an impressive twenty-nine NGOs, ranging from Greenpeace International to the European Chemical Industry Council and the Mediterranean Association to Save the Sea Turtles.²⁵

As is increasingly the case in environmental treaties which are to operate for a long period of time, the Meeting of the Parties is the organ that keeps under review the implementation of the Convention (Art.18(2)). More specifically, it has:

- To review generally the inventories carried out by the Parties and competent international organisations on the state of marine pollution and its effects in the Mediterranean;
- To consider reports submitted by the Parties under article 26;
- To adopt, review and amend as required the Annexes to the Convention and the Protocols, in accordance with a procedure laid down in Article 17;
- To make recommendations regarding the adoption of any additional protocols or any amendments to the Convention or the Protocols in accordance with articles 15 and 16;
- To establish working groups as required to consider any matters related to the Convention and the Protocols and Annexes;
- To consider and undertake any additional action that may be required for the achievement of the purposes of the Convention and the Protocols; and
- To approve the Programme Budget.

Meetings of the Parties of the Protocols are held in conjunction with that of the Barcelona Convention and have corresponding tasks (Dumping Protocol, Art.14; Emergency Protocol, Art.12; Athens Protocol, Art.14; Offshore Protocol, Art.30; Hazardous Waste Protocol, Art.15).

As the rules on land-based sources are in particular need of evolution and further elaboration, the Meeting of the Parties of the Athens Protocol, besides its general duty to keep under review the implementation of the Protocol, to consider information submitted by the Parties, to revise and amend Annexes and to take any other appropriate action, is in particular responsible for the formulation and adoption of programmes and measures by a two-thirds majority; the adoption of common guidelines, standards or criteria; and the issuing of recommendations (Arts.14 and 15(1)); the same pattern is followed in the Hazardous Wastes Protocol (Arts.15 and 16). However,

²⁵ See UNEP, Report of the Ninth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and Related Protocols, Barcelona, 5-8 June 1995, UNEP(OCA)MED IG.5/16, 8 June 1995, Annex 1, pp.27-36.

it is not clear to what extent these resolutions, recommendations and decisions are binding, at least on those found in the minority in each instance; it has, in fact, been argued that it is a common understanding that the said acts of the Meetings, unless otherwise provided as in the course of adopting or amending Annexes, do not constitute legally binding acts in a strict sense, and that they are, more than anything else, political understandings and/or undertakings, which, thus, do not demand specific performance susceptible to compliance control.²⁶

Having said that, point (vi) above shows that the functions enumerated in the Convention are merely indicative; the Meeting of the Parties may and should do whatever it takes to ensure effective implementation of the agreed rules. Hence, it is vested with considerable discretion and power which, if used effectively, can contribute to better performance by states of their contractual obligations. An illustration of this power is provided by a recommendation adopted at the Sixth Meeting of the Parties authorising the Secretariat to address an appeal to the Parties urging them to ratify the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes, to prepare an assessment of the nature of such movements in the Mediterranean including transit movements, to suggest a mechanism to assist the Parties in monitoring the movement of hazardous wastes in and through the Mediterranean and their disposal, and finally to prepare a draft legal instrument on the subject.²⁷

The provisional procedure of preliminary consultation in relation to the Dumping Protocol, as was developed over a period of years, provides another example of how this discretionary power has operated in practice: The Fourth Meeting of the Parties laid down definitions of the expressions "non-toxic", "rapidly converted" or "trace contaminants" found in Annex I of the Protocol and went even further into something reminiscent of dispute settlement by recommending a provisional procedure in order to avoid misunderstandings between the Parties when these definitions are invoked to justify dumping.²⁸ According to it, when a Party envisages dumping of an Annex I substance on the grounds that it is "non-toxic" or "is rapidly converted" or it exists only as "a trace contaminant", it must inform the Secretariat as soon as possible, and at least four months before the proposed operation is carried out, with all appropriate information. The Secretariat transmits this information to the other Parties which have one month to respond. If a Party wishes to protest, it has to state the reason why it deems the particular activity to be detrimental and thus not allowable. It

²⁶ See J.J.Ruiz, 'The Evolution of the Barcelona Convention and its Protocols for the Protection of the Mediterranean Sea against Pollution', in E.L.Miles & T.Treves (eds.), *The Law of the Sea: New Worlds, New Discoveries*, 1993, p.217; and cf. 1992 Paris Convention, Art.13(2), whereby decisions of the Commission are explicitly given binding force, while states still retain a discretion as to whether to opt out within a specified time-limit.

²⁷ See UNEP, Report of the Sixth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its related Protocols, Athens, 3-6 October 1989, UNEP(OCA)/MED IG.1/5, 1 November 1989, Annex V, p.1

²⁸ See UNEP, Report of the Fourth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols, Genoa, 9-13 September 1985, UNEP/IG.56/5, 30 September 1985, pp.35-9.

may also propose other methods of conversion or disposal of the wastes. This response is sent to the Secretariat which forwards it to the Party concerned and, if so asked, to the other Parties. Upon request of a Party, the envisaged dumping operation is postponed, should this be possible, until the case is examined in a future Meeting of the Parties. In the absence of mutual agreement to refer the case to a future Meeting of the Parties or to resolve the question bilaterally, the state envisaging the dumping activity notifies the others, through the Secretariat, of the measures to be applied, giving the reasons that make the operation necessary, before the Parties consider the matter in a Meeting. In case the dumping operation has been carried out without an agreement on its necessity or on the manner it is to be executed, the Parties consider the issue in their next Meeting. Before the actual dumping takes place, the possibility of convening an extraordinary Meeting upon request of three fourths of the Parties, pursuant to Article 14 of the Protocol, is of course open.

This is representative of the instrument's operation and elaboration after it is concluded. The more so, since the dumping recommendation stressed that this procedure could not substitute further efforts to improve the definitions of the expressions cited. On the contrary, the experience acquired through this notification and consultation procedure can show the way to unequivocal interpretations of these formulations. Hence, this is not primarily a dispute settlement process, and certainly not one involving any binding decision. The recommendation was silent on the potential power of the Meeting of the Parties to resolve the matter in an authoritative way, that is to authorise or ban the operation, thus replacing the state which has jurisdiction over the activity, especially in case the Meeting is convened after the actual dumping has occurred. Rather it is the interaction itself, exchange of information, reasoning by both sides, and exhaustive debate that is sought here in order to reveal flaws in the definitions and improve them. Of course, during this process, strength of arguments and collective pressure will arguably 'persuade' a Party with a weak case, in which case one may speak of a 'soft' dispute settlement mechanism. But the main effect is to internationalise what usually stays within the realm of national domain, i.e. implementation of international obligations, especially when they do not directly affect other states, and remove a large part of the concomitant discretion to interpret relevant rules. After the recent revision of the Dumping Protocol this procedure is henceforth inapplicable,²⁹ but a similar consultation provision has been endorsed for instances of emergency (Art.9).

Finally, one should note that at the 1995 revision of the Barcelona Convention, there has been an attempt to spell out more concretely these broad powers of the Meeting of Parties with regard to compliance control. Thus, new Article 27 stipulates that the Meetings *shall* - as opposed to the mere possibility that existed previously - assess compliance, albeit on the basis of the Parties' own reports, and "recommend the necessary steps to bring about full compliance...". This provision is very significant, for present purposes, and will be thoroughly discussed in the next Section.

²⁹ See *supra*, Chapter 2, pp.75-6.

Between the periodic Meetings of the Parties, the Bureau (Art.19), composed of six members elected at the Meetings observing the principle of equitable geographical distribution, exercises the management of the system and takes *interim* decisions: It reviews implementation of MAP; supervises the work of the Secretariat; follows the work of the standing subsidiary bodies, ie. the Socio-Economic Committee, which reviews the socio-economic programmes of MAP, and the Scientific and Technical Committee, with corresponding duties for the scientific and technical programmes,³⁰ and of the other institutional structures (MEDU/MAP, RACs etc.); decides on programme and budget adjustments, and on response in case of emergency situations.³¹

Finally, besides REMPEC,³² the other Regional Activity Centres (RACs) of the MAP system are national centres carrying out regional functions on behalf of the Mediterranean community, supervised by the Co-ordinating Unit in accordance with the decisions of the Meeting of Parties. The ones most relevant to the present study are the Blue Plan (BP) RAC in Sophia Antipolis, France; the Priority Actions Programme (PAP) RAC in Split, Croatia; the Environment Remote Sensing (ERS) RAC in Palermo, Italy; and the Cleaner Production (CP) RAC, in Barcelona, Spain.³³

5.1.2. Compliance Control at the Meeting of the Parties to the Barcelona Convention and Related Protocols.

The authority of the Meeting of the Parties to the Barcelona Convention to consider and undertake any action that may be required for the achievement of the purposes of the Convention and the Protocols (Barcelona Convention, Art.14(vi)) has considerable potential for furthering and improving performance of conventional obligations. Examples of that broad discretionary power have already been given; one could here recall just one such instance, i.e. the detailed guidelines and work plan, issued in 1987, on the development of programmes and measures for the implementation of the Athens Protocol.³⁴ What is more, as Peter Haas has convincingly argued, 'epistemic communities' emerging within MAP institutions, i.e. national experts conferring regularly and thus developing a common culture and increased awareness, help develop stronger national pollution

³⁰ Their establishment - in substitution of the meetings of national focal points for MED-POL, ROCC, Blue Plan, PAP and SPA - was decided at the Fifth Meeting of the Parties, see UNEP, Report of the Fifth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols, Athens, 7-11 September 1987, UNEP/IG.74/5, 28 September 1987, p.24; their terms of reference are laid down in UNEP, Refocusing of the Mediterranean Action Plan on Environmentally Sound Integrated Planning and Management of the Mediterranean Basin, UNEP(OCA)/MED IG.1/Inf.4, 1989, Annex III and II respectively.

³¹ See UNEP, Report..., *op.cit.* n.30, Annex I; and UNEP, Report of the Eighth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and related Protocols, Antalya, 12-15 October 1993, UNEP(OCA)/MED IG.3/5, 15 October 1993, p.5.

³² See *supra*, Chapter 2, p.88.

³³ For the sake of completeness, it should be noted that there are two more RACs in the framework of MAP, namely the Specially Protected Areas RAC in Tunis, Tunisia, and the Secretariat for the Protection of Coastal Historic Sites in Marseille, France.

³⁴ See UNEP, Report..., *op.cit.* n.30, pp.68-77.

controls.³⁵

But when it comes to direct and formal compliance control, it appears that Mediterranean states acting within the Meetings of Parties remain rather unconcerned. It is true that various delegations usually recapitulate their country's progress during the discussion that follows the Executive Director of UNEP's presentation of a report on the implementation of MAP in the preceding biennium, but that exercise remains on a rather political and hortatory plane. Although there are always distinct agenda items on the implementation of the Convention and Protocols, they have apparently never accommodated any debate on compliance as such, save frequent reference by the Co-ordinator to the failing reporting procedures and relevant recommendations.³⁶ It is, moreover, notable that NGOs have not been particularly active in this respect, despite their observer status at the Meetings.³⁷

That is certainly not what the negotiators of the 1976 Barcelona Convention envisaged when they adopted Article 21, which read:

“Compliance Control.

The Contracting Parties undertake to co-operate in the development of procedures enabling them to control the application of this Convention and the Protocols.”

This provision requires some special attention: On one hand, its wording is too general to signify any ‘hard’ obligation; the Parties “undertake to co-operate” with a view to developing procedures that are, however, left unspecified. Moreover, Article 18 had already designated the follow-up body, making Article 21 superfluous at first sight. On the other hand, as one has to interpret a legal text in such a way as not to render a part of it useless, some meaning must be given to this provision. Hence, it could be argued that Article 21 created a separate obligation on each state, running parallel to that of Article 14 which is addressed to the organ and not the Parties as such, to work with a view to devising suitable procedures for controlling compliance. This way, it stressed the importance of a continuous supervision if the objectives of the whole system are to be achieved, and at the same time admitted that relevant mechanisms were underdeveloped; in fact, the only concrete measure envisaged by the Parties at that time was a reporting procedure.

Notwithstanding the afore-mentioned mandate, no formal process to monitor compliance and enforce against delinquent states was put in place until the June 1995 revision Conference,³⁸ where the following formulation was adopted:

“Article 27. Compliance Control.

³⁵ See P. Haas, *Saving the Mediterranean - The Politics of International Environmental Cooperation*, 1990, esp. at pp. 155-64 and 224-47.

³⁶ See *infra*, p. 203.

³⁷ Notwithstanding a process of Secretariat consultation with NGOs focussing on the activities and prospects of MAP, see, e.g., UNEP, Report of the Consultation with Non-Governmental Organizations, UNEP(OCA)/MED WG.16/3, 1990.

³⁸ Under the 1987 Programme Calendar, development and adoption of such procedures was to be completed by 1990, see UNEP, Report..., *op.cit.* n.30, p.31, but that target was never achieved.

The Meetings of the Contracting Parties shall, on the basis of periodical reports referred to in Article 20 and any other report submitted by the Contracting Parties, assess the compliance with the Convention and the Protocols as well as the measures and recommendations. They shall recommend, when appropriate, the necessary steps to bring about full compliance with the Convention and the Protocols and promote the implementation of the decisions and recommendations."

One cannot help noticing that this 'procedure' is by no means new, or even a 'compliance control procedure' proper. As a matter of fact, it does not contain a single element that does not already exist under Article 18 of the Barcelona Convention. When trying to discover the reasons behind such conspicuous inability/unwillingness to address the issue, one is faced with a notable absence of references. The legislative history of both the old and the new provisions is indeed very hard to trace. In fact, there are no accessible detailed records of the 1976 or the 1995 Conference, so research has to be confined to the reports of Conferences and Meetings of Experts that examined amendments to the Convention and Protocols. From these, it can be seen that the initial (1994) revision proposal submitted by the Secretariat envisaged a special organ,³⁹ preferably the Secretariat itself, which would

"be vested with the authority:

(a) to assess, on the basis of periodic reports of Article 20 or of any other report, their compliance with the Convention, its Protocols and the Decisions and Recommendations adopted by the Meetings;

(b) to decide upon the steps to bring about full compliance and to assist a Contracting party to carry out its duties."⁴⁰

This suggests an increased appreciation by the Secretariat of the lack of specific, international and national, reporting and compliance-control mechanisms, "which are indispensable if the Barcelona system wants to improve its effectiveness".⁴¹ However, the proposal was not favourably met,⁴² and was eventually redrafted it in its present form.⁴³ The formulation adopted does not seem to have generated much discussion. In fact, the Legal Counsellor of MAP who was actually responsible for drafting the provision admits that the final version is no more than an attempt to reproduce the

³⁹ See UNEP, Proposed Amendments to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols, UNEP(OCA)/MED WG.82/3, 1994, p.22.

⁴⁰ Cf. the respective article of the 1992 Paris Convention for the Protection of the Marine Environment of the North-East Atlantic: "Article 23. Compliance. The Commission shall: (a) on the basis of periodical reports... and any other report submitted by the Contracting parties, assess their compliance with the Convention and the decisions and recommendations adopted thereunder; (b) when appropriate, decide upon and call for steps to bring about full compliance with the Convention, and decisions thereunder, and promote the implementation of recommendations, including measures to assist a Contracting party to carry out its obligations."

⁴¹ See UNEP, Results and Analysis of the Meeting of the Legal and Technical Experts to Examine Amendments to the Barcelona Convention and its Related Protocols and the Mediterranean Action Plan (MAP)(prepared by the Secretariat), 15 December 1994, p.4.

⁴² See UNEP, Report of the Meeting of Legal and Technical Experts to Examine Amendments to the Barcelona Convention and its Related Protocols and the Mediterranean Action Plan (MAP), UNEP(OCA)/MED WG.82/4, 1994, p.7.

⁴³ See UNEP, Proposed Amendments to the Convention for the Protection of the Mediterranean Sea against Pollution, UNEP(OCA)/MED WG.91/3, 1995, p.10.

relevant article of the 1992 Paris Convention, in a way that would be acceptable to the Barcelona Parties.⁴⁴ In this endeavour, the most important elements of a distinct non-compliance procedure, i.e. the authority of an organ other than the Parties themselves to assess and decide - as compared to issuing recommendations - on compliance issues, together with the possibility of providing assistance to states faced with difficulties, were done away with. The only innovatory element retained from the initial proposal was the provision of Article 14(2), whereby "[t]he Secretariat may, upon request from a Contracting Party, assist that Party in the drafting of environmental legislation in compliance with the Convention and the Protocols". The qualitative difference between what had been contemplated and what was actually adopted is obvious: The full 'authority' of the Secretariat to decide on measures to improve compliance and assist parties to that effect has been replaced with a mere advisory role, and that only upon request from a government.

In short, Mediterranean states have shown to date no willingness to endow their collective organ with anything more than a traditional 'soft' and informal supervisory function, let alone transfer such powers to a more independent expert body, such as the Secretariat. It is in fact only in the context of MED POL monitoring, i.e. outside the formal, 'hard' treaty rules, that there is to date some indication of procedures being developed that have the potential to lead to more vigorous and meaningful compliance control, as will be shown below.

5.2. Supervisory Techniques in the Mediterranean.

The first essential prerequisite for a meaningful compliance-control system is the gathering of relevant information, without which there is no factual basis to assess the extent of non-compliance or its causes, and consequently no corrective measure can be contemplated. Such information enhances the transparency element that, as previously stated, is necessary for any effective control over compliance.⁴⁵ The main sources of compliance information are self-reporting, which is the most significant and widely used; inspections by government officials or independent third parties; citizen complaints;⁴⁶ and ambient monitoring and research, either under governmental control or by independent bodies and experts.⁴⁷

Self-reporting and state-controlled monitoring are those generally preferred by countries participating in environmental regimes as they do not involve overriding state powers and

⁴⁴ From interview with the author.

⁴⁵ See Handler Chayes *et al.*, *op.cit.* n.5, pp.81-3; and *supra*, Chapter 3, pp.126-7. See also R.Wolfrum, 'Means of Ensuring Compliance with and Enforcement of International Environmental Law', 272 *Receuil des Cours*, 1998, Chapter II.

⁴⁶ See *infra*, p.233.

⁴⁷ See, e.g., 1978 Great Lakes Water Quality Agreement.

sovereignty.⁴⁸ Both of them serve a dual function, i.e. they provide information on implementation of and compliance with international rules and feed back on the improvements needed.⁴⁹

The importance of these techniques in the context of international marine pollution regulation is actually acknowledged in the LOSC, whereby states are urged to co-operate in promoting studies, undertaking scientific research and encouraging the exchange of information and data with regard to pollution of the marine environment, either at a global or regional levels, with a view to establishing the scientific criteria for the formulation of rules and standards for pollution prevention and control (Arts.200-201). States are additionally encouraged to “observe, measure, evaluate and analyse... the risks or effects of pollution of the marine environment” (Art.204(1)), to “keep under surveillance the effects of any activities which they permit or in which they engage in order to determine whether... [they] are likely to pollute the marine environment” (Art.204(2)), and publish relevant reports (Art.205).

The application of these information-gathering techniques in the Mediterranean context will be subsequently examined, together with another related mechanism, the co-operative regime of supervision under the Paris Memorandum on Port State Control, which importantly presents some additional features, as it goes beyond mere collection and exchange of information to a type of enforcement action.

5.2.1. Monitoring of the Marine Environment.

Monitoring provides the necessary data to assess the state of a particular environment and furthermore produces information about three broad categories of problems: model verification, to check the validity of assumptions and predictions used as the basis for sampling design or permitting and for evaluation of management alternatives; trend monitoring, to identify and quantify longer-term environmental changes anticipated as possible consequences of human activities; and last but not least, compliance control, to ensure that activities are carried out according to regulations and permit requirements.⁵⁰ The first two categories ideally form the basis of international regulation of the sector monitored.

However, this technique has important limitations.⁵¹ Hence, in the face of multiple and complex impacts, monitoring sometimes fails to provide adequate information for decision-making, resolve controversies related to specific discharges, and ensure environmental protection and restoration. Furthermore, it is frequently difficult to quantify and interpret observed effects in terms

⁴⁸ See Sachariew, *op.cit.* n.7, p.40.

⁴⁹ See *ibid.*, pp.32-3, 35-6 and 41.

⁵⁰ See Committee on a Systems Assessment of Marine Environmental Monitoring, Marine Board, Commission on Engineering and Technical Systems, National Research Council, *Managing Troubled Waters - The Role of Marine Environmental Monitoring*, 1990, pp.8 and 20.

⁵¹ *Ibid.*, pp.15-6.

meaningful to society, as they are not usually closely linked with research programmes or other types of pollution information designed to identify sources and understand the transport, fate, and effects of effluents or to elucidate natural environmental processes. Besides, monitoring programmes are often not designed to address public concerns directly or to provide information needed by managers or public policy makers. Meaningful communication with, and participation of the public and decision-makers in the development of monitoring schemes is thus rarely achieved.

Having said that, even when compliance control is not explicitly mentioned, monitoring, although not providing compliance assessment in legal terms, becomes a means of supervision in all those instances where an environmental agreement contains specific obligations for its parties. What is monitored, then, is not only the condition of a given environment, but also its response to control measures already put into practice and the degree of achievement of the objectives set by the legal instrument.⁵² Of course, to fulfil this function, monitoring has to be part of a regime involving more or less concrete rules and establishing an organ competent to receive monitoring results and to review treaty implementation;⁵³ consequently, it is directly relevant to assessing compliance only when international law mandates either quantitative standards or specific technologies, as Chayes and Chayes rightly point out using the example of the primary choice of quality objectives rather than emission standards in the Athens Protocol.⁵⁴

All international instruments applicable in the present context include some sort of monitoring scheme. The London Convention Parties, for instance, are required to monitor, individually or jointly, the condition of the sea to demonstrate compliance of their at-sea dumping and incineration practices with the overall intent of the Convention and the requirements of the Annexes (Art.VI(1)(d) and Resolution LDC 36(12)). At the same time, the Scientific Group on Dumping is continuously working towards identifying principles that should govern monitoring programmes, as well as more practical and relevant techniques. But the prime example of systematic monitoring is provided by the 1979 Geneva Convention which established an ambitious co-operative programme for the monitoring and evaluation of the long-range transmission of air pollutants in Europe (Art.9), supported by long-term financing as determined in the 1984 Protocol.

If one turns to the MAP context, monitoring of the marine environment is principally carried out under the Co-ordinated Pollution Monitoring and Research Programme (MED POL).

⁵² *Ibid*, pp.36-7. In this vein, the Fifth Consultative Meeting of the London Convention defined 'monitoring' as "...the assessment of changes in the marine environment caused by dumping operations. This comprises two components: 1. Monitoring for the purposes of surveillance of the marine environment is meant as the assessment of the spatial and temporal changes in the distribution, fates and effects of contaminants introduced by specific dumping operations; and 2. Monitoring as part of scientific investigation and research programmes is aimed at increasing knowledge of the processes that control the transport, fates and effects of contaminants released to the marine environment through dumping", see LDC V/12, para.4.17.

⁵³ Chayes & Chayes, *op.cit.* n.1, p.37.

⁵⁴ See *ibid*, pp.187-8; and *supra*, Chapter 2, p.63.

This Programme started with just seven pilot projects (MED POL - Phase I),⁵⁵ “due to limitations in facilities and scarcity of trained scientists”,⁵⁶ and involved more than eighty national research centres in sixteen Mediterranean states. In 1981, the Long-term Pollution Monitoring and Research Programme (MED POL - Phase II) was initiated,⁵⁷ covering twelve research projects, essential in providing the technical background for the adoption of concrete measures, especially with regard to land-based pollution,⁵⁸ and four different but complementary monitoring activities: monitoring of sources of pollution; monitoring of coastal areas, including estuaries; monitoring of offshore reference areas; and monitoring of transport of pollutants through the atmosphere; data quality assurance; and assistance.

MED POL II has been substituted by MED POL - Phase III in 1996.⁵⁹ At that stage of maturity, which will last until the year 2005, effort is concentrating on monitoring of and research on contaminants and pollutants in the marine and coastal environment and interpretation/assessment of the relevant results; generation of information on the sources, levels, amounts, trends and effects of marine pollution; development of capabilities for assessing the present and future state of the marine environment; formulation of proposals for technical, administrative and legal programmes and measures for the prevention and/or reduction of pollution; strengthening of capabilities of the national institutions; and assistance to Parties for the implementation of recommendations adopted.

Most importantly for present purposes, MED POL III acknowledges compliance control as one of its central objectives.⁶⁰ Hence, it intends to monitor, on a continuous basis, the implementation of action plans, programmes and measures for the control of pollution adopted or recommended by the Contracting Parties; to identify problems experienced in the implementation of the above, and formulate proposals that may assist in overcoming these problems; and to keep the Parties regularly informed about the status of the implementation of the adopted action plans, programmes and measures. This is going to be achieved through analysis and evaluation at a national, sub-regional or regional level of data and information generated by the Parties; compliance monitoring programmes carried out by national MED POL collaborating institutions; analysis and

⁵⁵ Namely baseline studies and monitoring of oil and petroleum hydrocarbons in marine waters; of metals, particularly mercury, in marine organisms; and of DDT, PCBs and other chlorinated hydrocarbons in marine organisms; effects of pollutants on marine organisms and their populations; and on marine communities and ecosystems; coastal transport of pollutants; and coastal water quality control (MAP, II(2)).

⁵⁶ MAP, II(2). Professor Raftopoulos sees the necessity of a pilot phase as a ‘system constraint’. It is coupled with the need to transfer environmental technology to those of the participating states that are incapable of meeting the kind of concerted action required by this component (social constraint), see E. Raftopoulos, *The Barcelona Convention and Protocols: The Mediterranean Action Plan Regime*, 1993, p.6.

⁵⁷ See UNEP, *op.cit.* n.22, Annex V.

⁵⁸ See *supra*, Chapter 2, pp.64-5. The main findings are described in UNEP/ECE/UNIDO/FAO/UNESCO/WHO/IAEA, *Pollutants from Land-based Sources in the Mediterranean*, *UNEP Regional Seas Reports and Studies No.32*, UNEP, 1984.

⁵⁹ See UNEP, Report of the Extraordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, UNEP(OCA)/MED IG.8/7, 2 August 1996, Annex IV.

⁶⁰ *Ibid*, pp.19-22

evaluation of data and information received through the national co-ordinators from national compliance monitoring programmes; target-oriented research in support of national compliance monitoring programmes; and preparation of relevant consolidated reports. Significantly, assistance is to be provided through the Secretariat to developing countries requesting training of their national experts, or technical advice to their national institutions participating in monitoring the effectiveness of the implementation of pollution control measures and reporting on national compliance thereon. This is by far the most straightforward acknowledgment of the importance of compliance control that the MAP Parties have ever come up with; it is not inconsequential, however, that this has been achieved in the context of a monitoring programme and not of the formal legal regime laid down in the Barcelona Convention and Protocols.

Note should also be made of the operation of a series of sub-regional arrangements in the Mediterranean which establish additional *fora*, namely joint commissions, for the exchange of information, and deliberation of local marine pollution issues. There are three such instruments in the region: The 1974 Agreement between Italy and Yugoslavia on Co-operation for the Protection of the Waters of the Adriatic Sea and Coastal Zones from Pollution; the 1976 Agreement between Italy, France and Monaco concerning the Protection of the Waters of the Mediterranean Shores and covering most of the contracting parties' waterfront, i.e. the Ligurian Sea (also known as the RAMOGE project); and the 1979 Agreement for the Protection of the Ionian Sea Waters signed by Italy and Greece; while a new one concerning the Sicilian/Tunisian Channel (Italy, Malta and Tunisia) has been under consideration at least since 1987.⁶¹

The principal value of these early instruments is that, in their application, they officially involve in the planning and decision-making process the Mediterranean "epistemic community" - either in the form of non-governmental organizations, such as the International Commission for the Scientific Exploration of the Mediterranean Sea (ICSEM) and the Federation of Institutions Concerned with Studies of the Adriatic, or national laboratories,⁶² a trend fully developed within MAP.

As a matter of fact, the legal instruments of MAP do not include compliance monitoring among the distinct monitoring duties they enunciate. More specifically, under the Barcelona Convention, the Parties must "endeavour to establish" complementary or joint programmes and a pollution monitoring system for the area (Art.12(1)). In this context, provision is made for special

⁶¹ See UNEP, Report..., *op.cit.* n.30, p.25. There also other activities that have not acquired formal legal status, such as the 'Adriatic initiative' launched by Italy and involving a process of bilateral and multilateral co-operation in co-ordination with MAP activities in order to protect the environment of the Adriatic Sea, see UNEP, *op.cit.* n.27, p.6 and Annex V, p.21. In this context Italy and Yugoslavia implement a sub-regional joint programme for the protection and development of the Adriatic..

⁶² See B.Boxer, 'Mediterranean Pollution: Problem and Response', 10 *O.D.I.L.*, 1982, p.334; and Haas, *op.cit.* n.35, pp.148-9.

annexes prescribing common procedures and standards for pollution monitoring (Art.12(3)).⁶³

Particular monitoring and research activities are called for under the Athens Protocol. In fact, monitoring has to be carried out at the earliest possible date, within the framework of Article 12 of the Convention, in order to systematically assess the levels of pollution along Mediterranean shores, in particular with regard to activities and sources to be controlled under Annex I; relevant information has to be periodically provided and the effects of programmes and measures implemented under the Protocol evaluated (Art.8).

In the same vein, pursuant to the Offshore Protocol, the Parties undertake to require operators of offshore installations to measure, or to have measured by qualified experts, the effects on the environment of the activities they carry out, in the light of the nature, scope, duration and technical methods employed in these activities and of the characteristics of the area; and to report on them periodically or upon request by the competent authority for the purposes of an evaluation by the latter, according to a procedure established in its authorisation system (Art.19). This is a very interesting provision because it assigns the duty in question to the operator and not to public authorities, whilst entrusting supervision over this monitoring to the latter and apparently connecting relevant findings with the authorisation. In other words, both the performance of monitoring and the resultant information on the quality of the marine environment affected determine the fate of the actual offshore exploitation activities. The above requirement importantly complements the environmental impact assessment needed for the initial authorisation to be granted (Arts.5(1)(a), 6(1) and Annex IV);⁶⁴ in this way, an extended and comprehensive system of continuous control of the impact of offshore operations is put in place.

Be that as it may, despite the great amount of effort and resources spent on MED-POL and the undeniable progress in the development of a co-operative scientific and informational structure and understanding achieved, in 1985 the Executive Director of UNEP deplored the non-existence of a Mediterranean basin-wide monitoring network producing data on a regular basis.⁶⁵ This situation, has repercussions on national infrastructure and organisation of scientific monitoring which, in turn, forms an essential part of the follow-up mechanism required in order to provide data on the actual implementation and the results achieved after specific pollution control measures are agreed upon - and of course influences the quality and viability of the rules themselves.

⁶³ These criteria were rather developed in the context of MED POL - Phase II, see UNEP, Long-term Pollution Monitoring and Research Programme (MED POL - Phase II), Basic Criteria for the Implementation of National Monitoring Programmes, Athens, 28 Sept.-2 Oct.1981, UNEP/WG.62/3/Rev.1, 1982. In Annexes I and II, a model agreement between UNEP and each Party is laid down, with a view at assisting the latter implement their National Monitoring Programmes in a uniform manner. Although proposals on the establishment of joint monitoring areas were submitted at the Barcelona Conference, they did not meet with consensus and thus were abandoned, see B.de Yturriaga, 'Convenio de Barcelona de 1976 para la Protección del Mar Mediterraneo contra la Contaminación', 2(1) *Rev.Inst.Eur.*, 1976, p.94.

⁶⁴ And see *infra*, Chapter 8, p.334.

⁶⁵ See UNEP, *op.cit.* n.28, Annex III, pp.2-3.

Specific monitoring requirements under the Athens Protocol similarly do not seem to have been effectively met. By 1987, for example, some Parties had yet to designate the national authorities responsible for pollution monitoring,⁶⁶ which led the Deputy Executive Director of UNEP to stress that essential information on the courses of pollution and pollutants inputs into the Mediterranean are not being supplied by the Contracting Parties, although these sources (large cities, industrial complexes, rivers) are quite visible and extensive data on them are published in open literature.⁶⁷ In 1993, it was again noticed that several countries - albeit not identified - were still without a fully operational monitoring programme,⁶⁸ while in 1997 the year 2000 was set as the target date for the effective operation of a wholesome monitoring system in each country.⁶⁹ What is more, as will be seen in the next Section, the Barcelona Parties do not transmit reports as they should; consequently, they do not communicate their monitoring data - assuming they conduct systematic monitoring at all.

5.2.2. Reporting.

This last point brings us to reporting, arguably the most indispensable element of an environmental treaty regime, especially when the latter calls for a continuous legislative, administrative and enforcement effort at the national level,⁷⁰ such as is required under the Barcelona system. To date, reporting is indeed the principal technique used in the context of the supervisory function of international environmental institutions - albeit with varied success.⁷¹ Its importance was plainly acknowledged during the UNCED; hence, Agenda 21 (para.39.7) reads:

“The Parties to international agreements should consider procedures and mechanisms to promote and review the effective, full and prompt implementation. To that effect, States could, *inter alia*:

(a) Establish efficient and practical reporting systems on the effective, full and prompt implementation of international legal instruments;

.....”

The content of the reporting obligation - usually on an annual or bi-annual basis - varies, but it usually covers at least measures taken in implementation of the relevant international agreement. It may include statistical information on production, imports and exports; on the grant of permits and authorisations, including relevant criteria; on implementing measures, and relevant decisions taken by national authorities; scientific information gathered by monitoring; and

⁶⁶ See UNEP, Report..., *op.cit.* n.30, p.51.

⁶⁷ *Ibid*, Annex III, p.3.

⁶⁸ See UNEP, *op.cit.* n.31, p.7.

⁶⁹ See UNEP, Report of the Tenth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, UNEP(OCA)/MED IG.11/10, 3 December 1997, Annex IV, Appendix II, p.44.

⁷⁰ See Sachariew, *op.cit.* n.7, p.40.

⁷¹ See, e.g., US General Accounting Office, International Environment - International Agreements are not Well Monitored, GAO/RCED-92-43, January 1992, p.23; and Chayes & Chayes, *op.cit.* n.1, Chapter 7.

information on breaches or violations by persons under the jurisdiction or control of the reporting state. The essential objective of the obligation is to furnish the collective organs with information on the various aspects of the parties' activities in implementation of their commitments and the results achieved. In this context, the most important contribution of that data, especially in case a wholesome system of compliance control is not in place, is to increase transparency and thus make it possible to exercise informal pressure towards more stringent observance of the rules commonly set.

Its main weakness, on the other hand, lies in the origin of the report: It is the exact actor whose actions are under scrutiny that is endowed with the task of self-reporting, which makes the whole process rather unreliable, as it is likely that each state will not reveal any major breach of its obligations when it engages in this exercise. One way to tackle this problem is to accept reports from other more independent and thus arguably more reliable sources, e.g. citizens, NGOs or even international inspectors,⁷² but it does not seem that this solution has gained any acceptance in the MAP system as yet. Another technique that can produce more reliable information is to design detailed standard formats that would restrict states' discretion regarding the kind and extent of information they may submit.

In fact, reporting has considerable potential for inducing compliance,⁷³ because of its non-adversarial nature and the fact that it exposes non-compliant behaviour to public scrutiny, but, to this effect, it has to be viewed as an entire process involving gathering of information and submission at a precise deadline; processing, study and assessment from an international body; formulation of an aggregated report on implementation, which requires uniform and comparable national reports, ideally in accordance with an established format; and finally feedback from the international body on the contents of the compilation.⁷⁴ It is, therefore, worthwhile to look in some detail at the reporting requirements laid down in the international instruments that are applicable in the Mediterranean, as well as the actual operation of this technique within respective regimes, namely MAP, MARPOL, the London Convention, and the Basel and Bamako Conventions.

5.2.2.1. Reporting under the Barcelona Convention and Protocols.

According to Article 26 of the Barcelona Convention, the Parties have the procedural obligation to transmit to the Secretariat reports on

- (a) the legal, administrative and other measures taken by them for the implementation of [the] Convention, the Protocols and of the recommendations adopted by their meetings;
- (b) *The effectiveness of the measures referred to in (a) and problems encountered in the implementation of the instruments,*

⁷² See Sachariew, *op.cit.* n.7, pp.48-9; and U.S General Accounting Office, *op.cit.* n.71, p.42.

⁷³ See Kiss & Shelton, *op.cit.* n.1, p.100, who argue that "the strength of the system is both psychological and political".

⁷⁴ See Sachariew, *op.cit.* n.7, pp.40 *et seq.*

in such form and at such intervals as the Meetings of the Parties may determine. In preparation for the 1995 revision, the Secretariat proposed that the reporting provision should, *inter alia*, cover, in particular, preventive and enforcement measures,⁷⁵ but that significant additional requirement was plainly rejected.

Monitoring results and data are also covered by the reporting obligation. The Secretariat has then to transmit all information to the other Parties and thus enable them to exercise control over each one's performance through the standing organs. The Secretariat itself did not use to have any duty comparable to that of the EC Commission,⁷⁶ i.e. to report on the implementation of the Convention and Protocols to the Meeting of the Parties, until recent amendment of the relevant provision (Art.17(vi)).

Under the Dumping Protocol, national authorities have to keep records of the nature and quantity of the waste to be dumped and of the location, date and method of dumping (Art.10(1)(c)).⁷⁷ These records are to be transmitted to the Secretariat and through it to the Meeting of the Parties (Art.14(2)(b)).⁷⁸ It appears that there are no particular problems in the implementation of the Dumping Protocol, and that no dumping of matter prohibited under it takes place.⁷⁹ However, not all states had designated the competent national authorities by 1985; the Fourth Meeting of the Parties urged them to do so, and also to transmit 'nil' reports, even when there are no permits granted or dumping activities taking place in order to have a complete picture of the actual situation,⁸⁰ but such a practice has not yet been adopted.

Under Article 6 of the Emergency Protocol, each Party undertakes to disseminate information concerning the competent national organisation or authority responsible for combatting pollution of the sea; the competent national authorities responsible for receiving reports of pollution of the sea and for dealing with matters concerning measures of assistance between Parties; as well as new ways in which pollution of the sea may be avoided, new measures of combatting pollution and the development of research programmes. This dissemination of know-how is crucial for the strengthening of the response capacity in less-developed countries. In the same vein, states have to communicate such information to the regional centre, which in turn will make it available to any interested country.

Mediterranean states have not had a record of regularly reporting emergency situations to

⁷⁵ See UNEP, *op.cit.* n.42, p.22.

⁷⁶ See *infra*, p.229.

⁷⁷ Cf. 1986 Noumea Dumping Protocol, Art.14, whereby Parties have to instruct their maritime inspection services to report any incidents or conditions which give rise to suspicions that dumping in contravention of the Protocol has occurred or is about to occur.

⁷⁸ See UNEP, *op.cit.* n.28, p.35; and UNEP, *op.cit.* n.31, Annex IV, p.8, for relevant recommendations.

⁷⁹ See B.Vucas, 'The Protection of the Mediterranean Sea against Pollution', in U.Leanza (ed.), *The International Legal regime of the Mediterranean Sea*, 1987, p.429. For example, six states had reported dumping by special or general permits by 1985, and there were no reported cases of emergency dumping

⁸⁰ See UNEP, *op.cit.* n.28, pp.32-3.

REMPEC; that is why, in 1987, they agreed that they *should* report at least all spillages or discharges of oil in excess of 100 cubic metres as soon as they have knowledge of them using a Standard Alert Format.⁸¹ Moreover, they reaffirmed that each state *should* update annually the information provided to REMPEC on national organisation and the competent authorities in charge of combatting marine pollution; specific national regulations aimed at preventing accidents likely to cause marine pollution; national regulations regarding the use of products and combatting techniques; bilateral or multilateral agreements signed with other Mediterranean Parties; research programmes, experiments and major exercises on the various aspects of marine pollution response; and purchase of major items of equipment.⁸²

Submission by states of information on measures taken, results achieved and difficulties encountered is also the favoured follow-up method of the Land-Based Sources Protocol (Art.13). Such information must include, among others, statistical data on the authorisations granted under Article 6; data resulting from monitoring; quantities of pollutants discharged; and programmes and measures implemented in implementation of the substantive provisions.⁸³ Moreover, when specific measures or criteria are adopted, they are usually accompanied by a concrete requirement to provide the Secretariat with "the fullest information possible" on legislation and administrative measures on existing national standards and criteria, on measures taken in implementation of the above, and of relevant monitoring data.⁸⁴

Lastly, the Meeting of the Parties to the Offshore Protocol has a mandate to determine procedures for the submission and collection of information that the Parties will provide regarding measures taken, results achieved, and the difficulties encountered in the application of the Protocol (Art.25). Almost identical wording is adopted in Article 11 of the Hazardous Waste Protocol, which, however, includes another - arguably more significant - relevant provision, whereby "any Party which has a reason to believe that another Party is acting or has acted in breach of its obligations" informs the Secretariat thereof and, "simultaneously and immediately", the state against whom the allegations are made (Art.13(1)). What is more, the Secretariat is actually empowered to carry out a verification of the substance of the allegation through consultation with the Parties concerned and submit a relevant report to the Meeting of the Parties (Art.13(2)). Although it is not specified what, if anything, the latter is expected to do when it receives this report, this is a rather strong provision, obviously inspired by a similar procedure established under the Basel and Bamako Conventions examined below, but it remains to be seen how and whether it will be put into effect after the

⁸¹ UNEP, Report..., *op.cit.* n.30, p.84.

⁸² *Ibid*, p.86.

⁸³ According to the work plan approved at the Fifth Meeting of the Parties, a procedure for the collection and submission of information from the Parties on measures taken, results achieved, and difficulties encountered in the application of the Protocol was to be formulated by MEDU and WHO by December 1986, see *ibid*, p.71, but this target was not met.

⁸⁴ See, e.g., *ibid*, pp.79 and 81; and UNEP, *op.cit.* n.27, Annex V, pp.10, 13 and 14.

Protocol enters into force, and indeed whether it will lead to any responsive action in a manner that would add some real substance to the compliance-control provision of the Barcelona Convention.

All said, despite these unambiguous undertakings, Mediterranean countries have to date a rather poor reporting record, as is demonstrated by the Meeting of the Parties' regular issuing of Recommendations urging states to submit annual or bi-annual reports. The same countries that adopt these Recommendations, however, fail to observe them when they return home.⁸⁵ Hence, in the 1985, 1987 and 1991 Meetings, the necessity of establishing an annual general report on measures taken in application of the Convention and Protocols, ought to be presented to the Secretariat by the 30th June each year, was reaffirmed.⁸⁶ In fact, the target year on which all Parties had to submit their annual report was 1987.⁸⁷ However, by 1991, the Executive Director of UNEP was noting that only four countries were doing so,⁸⁸ unfortunately he did not even name them, and thus we do not have even that small piece of information considering that actual reports are not publicly accessible. In the same vein, the Programme Calendar 1986-1995 included the target of developing reporting formats required under the Dumping, Emergency and Athens Protocol by 1990.⁸⁹ To this end, the Secretariat distributed questionnaires, which were in turn not returned in time, if at all. By 1991, only France and Spain had completed the questionnaires on land-based sources sent to all Parties in 1989, whereas no answers were received to a letter asking for information on the implementation of existing or new legislation related to the measures against pollution adopted by the Parties since 1985.⁹⁰

In short, although it can never be assumed that a failure to report directly implies that the negligent state is not respecting its substantial obligations, one can safely conclude that reporting under the Barcelona Convention and Protocols does not fulfil its proper role. Even in the rare instances when it actually takes place, it is not being put in any constructive use, nor is it available to the public, or used to increase transparency and collective pressure towards better compliance in any way.⁹¹

⁸⁵ See UNEP, *op.cit.* n.27, Annex IV, p.4; UNEP, *op.cit.* n.31, p.7 and Annex IV, p.3.

⁸⁶ UNEP, *op.cit.* n.28, pp.25; UNEP, Report..., *op.cit.* n.30, p.51; and UNEP, Report of the Seventh Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and related Protocols, UNEP(OCA)/MED IG.2/4, 11 October 1991, p.15.

⁸⁷ UNEP, Report..., *op.cit.* n.30, p.27.

⁸⁸ UNEP, *op.cit.* n.27, Annex III, p.4.

⁸⁹ *Id.*

⁹⁰ See *ibid.* Annex III, p.4 and Annex IV, p.2; and also UNEP, *op.cit.* n.31, p.7.

⁹¹ But even in the most developed regimes of marine protection of the North and Baltic Seas, measures to verify compliance are not very effective. Monitoring is mainly left to individual countries, and reports on national measures are scarce and voluntary, although there are standardised formats and HELCOM reports require information even on emissions from individual factories, see P.M.Haas, 'Protecting the Baltic and North Seas', in Haas, Keohane & Levy (eds.), *op.cit.* n.1, pp.169-70; but cf. O.Greene, 'Implementation Review and the Baltic Sea Regime', in D.G.Victor, K.Raustiala. & E.B.Skolnikoff (eds.), *The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice*, 1998, pp.177-220.

5.2.2.2. Reporting under MARPOL.

MARPOL reporting requirements are very extensive indeed and vary considerably. The basic ones are found in the main body of the instrument, but there is also a range of relevant duties imposed in the special Annexes. The more typical reporting requirements are found in Articles 11 and 12, whereby the Parties undertake to furnish the IMO with the texts of laws, orders, decrees, regulations and other instruments related to the scope of the Convention; a list of nominated surveyors or recognised organisations to which the state has delegated the power to act in the administration of matters relating to the design, construction, equipment and operation of ships carrying hazardous substances, including specific responsibilities and conditions of the authority delegated;⁹² a sufficient number of specimens of certificates issued; a list of reception facilities, including their location, capacity and other characteristics; official reports or summaries thereof in so far as they show the results of the application of the Convention; and an annual statistical report of penalties actually imposed for infringement of the Convention (Art.11(1)). IMO has to notify the other Parties of the receipt of all such communications and circulate all information, save the texts of legislative instruments (Art.11(2)). Every time a casualty occurs, the flag administration can choose to supply IMO with information concerning the findings of the relevant investigation, if it considers it helpful in determining what changes in MARPOL might be desirable (Art.12). Article 4(3) further requires flag administrations to promptly inform the Party which has referred an alleged violation, and IMO, of the action taken in response. Article 6 instructs all states to furnish such evidence to the flag state and reiterates the latter's obligation to report on the action taken (paras.3 and 4).

In addition, when a state allows a ship to be exempted from the construction requirements of Annex I and/or to apply an alternative, it must, within 90 days, notify IMO of the exemption and the reasons therefore and/or particulars of the alternative requirements; IMO has to circulate all information to the other Parties (Annex I, Regs.2(4)(c) and 3(2)). The same applies to special ballast arrangements in existing tankers (Reg.13D(3)), and to alternative cargo transfer systems designed to reduce outflow of oil (Reg.23(5)). Similar stipulations apply to equipment exemptions under Annex II (Annex II, Reg.2(6)). When carriage of a liquid substance in bulk which has not been categorised is involved, the Parties involved must communicate the particulars of the substance and of the provisional assessment they have to make, not later than 90 days after carriage (Reg.3(4)).

With regard to special areas, where all discharges of noxious liquid substances are prohibited, states bordering these areas have to notify IMO - at least six months in advance - of the collectively agreed date from which the special requirements shall apply; typically, this will coincide with the effective operation of reception facilities indispensable for the prohibition to be meaningful (Annex II, Reg.5(13)). The same applies to garbage reception facilities under Annex V (Reg.5(4)).

⁹² See also Annex I, Regulation 4(c); Annex II, Regulation 10(2).

Importantly, each Party has to notify IMO for transmission to the other states concerned of all cases where noxious liquid substances or oil reception facilities are allegedly inadequate (Annex II, Reg.7(4); Annex I, Reg.12(5)). A similar stipulation is found in Annex IV on sewage reception facilities (Reg.10(2)), and Annex V on garbage (Reg.7(2)).⁹³

The record of reporting under MARPOL has significantly improved if compared with its predecessor, OILPOL,⁹⁴ but is still relatively poor; for instance, in 1994, MARPOL had been ratified by eighty-three countries whose fleets comprised over 90% of the world merchant marine, but only a few - around 20% of the Parties by 1992,⁹⁵ especially industrialised countries, submit the mandatory annual reports that would furnish the appropriate data on which to evaluate performance.⁹⁶

IMO has been criticised as failing to put into effective use the reports it does receive by analysing them or making data therein comparable,⁹⁷ although it has admittedly been active with a view to improving the quantity and quality of information it receives. In 1985, for instance, it established a standard reporting format to facilitate comparisons,⁹⁸ while at its Thirty-second Session, it decided to develop different formats each focussing on distinct requirements; to set a deadline for submission; to insist that 'nil' reports, i.e. no incidents or inadequacies, are indispensable to complete the picture; to request the Secretariat to carry out periodic evaluations of the information submitted; and to issue at each MEPC session a list of coastal and port states which have not submitted annual reports and flag states which have not responded to allegations.⁹⁹

An analysis of the reports transmitted since 1983, when MARPOL entered into force, until the end of 1991 has been carried out by AIDEnvironment, an NGO based in Netherlands, and submitted to the MEPC by Friends of the Earth International.¹⁰⁰ This study has a limited scope, as it focuses on investigating reports under Articles 4(3) and 11, and information contained therein with regard to enforcement of discharge regulations. Nevertheless, it is very helpful in identifying certain flows in feed-back on the application of MARPOL that can be safely generalised, and is a good illustration of how effective NGO involvement in the follow-up process can be.

The main conclusion of the study is that the data submitted to IMO are, in general, lacking

⁹³ See also Guidelines for the Implementation of Annex V, paras.5 and 6, whereby all information on the development and use of shipboard equipment for processing garbage and of relevant port facilities should be forwarded to IMO in order to stimulate further studies and development by all Parties of the appropriate technologies.

⁹⁴ See P.S.Dempsey, 'Compliance and Enforcement in International Law - Oil Pollution of the Marine Environment by Ocean Vessels', 6 *NW.J. of Int'l L. & Bus.*, 1984, 459-561.

⁹⁵ See MEPC, Overview of mandatory reporting requirements under MARPOL 73/78 - Note by the Secretariat, MEPC 36/21/3, 5 August 1994, p.1.

⁹⁶ See 1994(2) *IMO News*, p.13.

⁹⁷ See, e.g., R.Mitchell, 'Intentional Oil Pollution of the Oceans', in Haas, Keohane & Levy (eds.), *op.cit.* n.1, p.231.

⁹⁸ MEPC/Circ.138, 15 May 1985; re-circulated as MEPC/Circ.228, 29 March 1990.

⁹⁹ See MEPC, Report of the Thirty-second Session, MEPC 32/20, 24 March 1992, p.35.

¹⁰⁰ See, G.Peet, *Operational Discharges from Ships - An Evaluation of the Application of the Discharge Provisions of the MARPOL Convention by its Contracting Parties*, 1992.

in both quantity and quality, which is attributed to incomplete reporting by most Contracting States, and to the standard format used. Therefore, one cannot assert with any certainty whether the entry into force of MARPOL has resulted in a decrease of the number of operational discharges of oil from ships. This is more so in relation to Annex II substances: Since April 1987, when the Annex entered into force, only seven alleged discharges had been reported - one in port by Yugoslavia. Similarly, since the end of 1988, when Annex V entered into force, only two Parties - the US and Germany - had reported discharges of garbage. It is characteristic, in this connection, that the author of the study feels unable to resolve whether there are hardly any discharges of substances like noxious chemicals or garbage, or whether states are not making adequate efforts with regard to their detection - although he feels that the latter is more likely. Furthermore, the analysis shows that in 58,2% of cases referred to flag states, reports on action taken had not been submitted. Again, one should be cautious when drawing conclusions on whether this implies non-compliance with the substantive obligations or with just the reporting duty.

What is unequivocal is that most Parties to MARPOL do not submit statistical reports on penalties for violations of the Convention. Of the 1,075 reports analysed in which the location of the violation was identified, only some forty concerned the waters of the Southern hemisphere. Importantly, three-hundred cases involve infringements that occurred in the Mediterranean Sea, which is the leading region from this aspect. Thus, although enforcement efforts seem to be largely made in the vicinity of industrialised states, the Mediterranean as a whole seems rather well off in this respect.¹⁰¹

A closer examination of the data shows that only six Parties had - up to 1991 - submitted reports for each year since the entry into force of MARPOL, including two Mediterranean states, Greece and Cyprus. More than thirty Parties had never submitted a report to IMO, including Algeria, Lebanon, Spain, Syria and Tunisia, while Malta and Turkey had just become parties in 1991. The rest had furnished information for one or a few years only.¹⁰² Interestingly, France had submitted a report only for the first year of MARPOL's application and Italy and Israel for the first three and four years respectively, and had stopped since; the reasons for this phenomenon are unclear, and the study does not offer any possible explanations.¹⁰³

The study attempts to identify possible reasons, in addition to mere non-compliance with

¹⁰¹ But it seems that most of the 'detection effort' actually takes place in the Northern waters of the basin. Another point stressed in the study with regard to the methods of detection is that only three countries, namely Germany, Greece and Italy, had submitted regular reports indicating that port inspection was the source of detection, while a substantial number of countries, in fact active in the field of port inspection, had not submitted reports about these activities, not even through a joint report by the Secretariat of the Paris MOU, *ibid*, pp.11-2.

¹⁰² For example, Egypt had reported for three out of the five years of membership, and Yugoslavia for three out of eight.

¹⁰³ It should be noted in this context that even when reports are filed, it should not be presumed that they provide complete information. Hence, Cyprus completes only one of the eight format sections, seemingly that referring to flag state response action, Egypt two, and Greece an average of five. It is, furthermore, characteristic that only Greece completes the annual statistical report on penalties, see Peet, *op.cit.* n.100, Annex 14.

the substantive provisions of the instrument, for this poor performance.¹⁰⁴ It suggests that it is probable that in some cases there was no information to be reported, when no discharges were detected and no ships flying the flag of the countries concerned have been involved in alleged discharges, despite the importance of even 'nil' reports for a realistic assessment of the regime's operation. There is also some evidence demonstrating that Parties have been active in the enforcement of MARPOL, but have not forwarded relevant information to IMO; this is inferred by a number of reports where a flag state reacts to a referral by a port or coastal state, which apparently has been submitted to the former but not to IMO.

The MEPC took into account the findings of this investigation and the recommendations to make reporting more practical and useful contained therein, and approved revised reporting formats, at its Thirty-fourth Session in 1993.¹⁰⁵ The ensuing discussion at the FSI, in the light of the mere sixteen annual reports received for 1991 and 1992,¹⁰⁶ reveals the attitude of Parties.¹⁰⁷ Some delegations questioned the purpose and usefulness of compulsory annual reporting, as the record had shown that only a small number of states had responded over many years. In fact, the Sub-Committee decided to refer the matter to the MEPC for consideration and decision on whether to continue this procedure or amend the relevant articles of MARPOL in order to abolish it altogether.

However, MEPC took the view that there is no question of changing MARPOL requirements for mandatory reporting, and urged compliance with the respective duties. In view of the fact that, during 1993, the Secretariat had received complaints from Parties about what they saw as increased requirements of the new formats,¹⁰⁸ the MEPC discussed whether the high threshold of relevant requirements may be one of the reasons for the problem, and further requested FSI once again to consider existing arrangements with a view to identifying the nature of difficulties experienced, including possible recommendations on assistance in training of personnel responsible for dealing with reports under MARPOL.¹⁰⁹

Once more, one can clearly see IMO putting a great amount of effort into improving the effectiveness of the reporting mechanism. However, absent, on the one hand, state willingness and, on the other, any inducing or coercive strategy, results are and are likely to remain scanty.

5.2.2.3. Reporting under the London Convention.

London Convention Parties are required to keep records of and send reports on the nature

¹⁰⁴ See *ibid.*, p.6.

¹⁰⁵ See MEPC 34/23/Add.1, Annex 11; circulated as MEPC/Circ.266, 18 October 1993.

¹⁰⁶ Including Croatia, Cyprus and Greece. By the end of 1994 fifteen states had provided information for 1993, among them Croatia, Greece and Spain, see FSI 3/4/1, 28 November 1994, Annex 1.

¹⁰⁷ See MEPC, *op.cit.* n.95, pp.2-3.

¹⁰⁸ See FSI, Report to the Maritime Safety Committee and the Marine Environment Protection Committee, FSI 3/4/2, 28 November 1994, p.2. In the view of several Parties, some practical formats such as the one-line entry used in other reports should be considered.

¹⁰⁹ *Ibid.*, at para.21.14.

and quantity of all matter permitted to be dumped, and the location, time and method of dumping (Art.VI(1)(c)), and on permits issued for the incineration of wastes at sea (Annex I, Addendum, Regulation 9). Under the 1996 Protocol this requirement will also extend to the quantities actually dumped (Art.9.1.2.). Reports on the general permits issued have to reach the Secretariat annually, either directly or through an organ established under an appropriate regional agreement, whereas special permits have to be notified immediately after they have been issued.¹¹⁰ Accordingly, general permits issued by Mediterranean states could be channelled through the MAP Secretariat, and there is no reason why this could not be extended to cover special permits as well. This way, the problem of discharging the reporting obligations could be relegated to the regional level, and dealt with simultaneously for both instruments.

Parties are also under a duty to transmit information on monitoring of the conditions of the seas for the purposes of the Convention, carried out individually or in co-operation with other Parties and international organisations (Art.VI(1)); on the approval of marine incineration facilities (Annex I, Addendum, regulation 3); on the dumping of wastes or other matter without a permit in cases of *force majeure*, or in any case which constitutes a danger to human life (Art.V(1)); on emergency dumping of substances otherwise prohibited to be dumped at sea (Art.V(2)); on measures adopted in addition to those required by the Convention itself with regard to 'black list' substances (Art.IV(3)), and to criteria and measures which have to be taken into account when a permit is issued (Art.VI(3)); and on the application of the Convention to vessels and aircraft entitled to sovereign immunity (Art.VII(4)).

It is expected that when the 1996 Protocol enters into force the reporting requirement will also cover administrative and legislative measures taken in implementation of the instrument, including a summary of enforcement measures (Art.9.4.2.), as well as the effectiveness of these measures and any problems encountered in their application (Art.9.4.3.)

The Consultative Meeting of the Parties has adopted reporting formats and procedures for the notification of the above information, but it seems that these do not make a big difference with regard to actual performance of relevant duties. It is characteristic that during 1991 and 1992 approximately two thirds of the Parties had not lodged any reports - including 'nil' reports - with the Secretariat.¹¹¹ However, the Consultative Meeting does not seem to envisage more drastic action

¹¹⁰ See LC, Reporting requirements under the London Convention 1972 - Note by the Secretariat, LC 17/WP.1, 3 October 1994, p.1.

¹¹¹ See LC, Report of the Seventeenth Consultative Meeting, LC 17/14, 28 October 1994, p.13. By 1993 and since entry into force in 1975, the reporting record of the Mediterranean Parties was as follows: France had been reporting without failure throughout the period, as had Malta; Greece had only failed to do so once, and so had Italy and Spain; Croatia had provided information for 1992, which was the first year after it joined the regime, while for Egypt the Convention had just entered into force; Cyprus had not reported for the two years it had been a Party, and Slovenia had not sent any information for the first year it joined in; Monaco had missed out nine of its fifteen years of participation, while Morocco had missed ten out of fifteen, Tunisia three out of sixteen, and Yugoslavia had submitted three reports during its sixteen year participation; finally, Libya, which was a party since 1976 had never provided any information, (continued...)

to improve the situation than advising, from time to time, the Secretary-General of IMO "to outline in writing to Parties their obligations...".¹¹²

In view of the above, it is not surprising that data compilation proceeds at a very slow pace, and by August 1994 had covered permits issued in 1985 and 1986.¹¹³ Bearing in mind that the reports include only permits issued in the years specified and thus do not reflect dumping during this period under licenses issued before, and also that some of the activities authorised may have taken place after 1986, some tentative conclusions may be drawn on the pattern of dumping in the Mediterranean. Firstly, it must be noted that of the Mediterranean Parties having provided information for 1985, Greece, Monaco, Morocco and Tunisia have submitted 'nil' reports, whilst they all failed to report for 1986; similarly, Yugoslavia had not provided any data for both years.¹¹⁴ Only France, Italy and Spain seem to be engaged in dumping operations, with Spain issuing only one permit each year involving an Atlantic site. France, which is the main actor in this context, has authorised dumping of industrial waste only in the Atlantic, whereas more than one million tonnes of dredged material have been allowed to be discarded in the Mediterranean during that two year period.¹¹⁵ Italy authorised the dumping of 154,898 tonnes of dredged material in the Mediterranean in 1985, while in 1986 it allowed the disposal of 197,391 tonnes of TiO₂-production waste, but it did not communicate information on the site; it would nevertheless seem reasonable that it be somewhere in the seas around its coasts.¹¹⁶ On condition that this reporting reflects the real situation and that no uncontrolled dumping takes place in the region, one might infer from the above that dumping is - or at least was ten years ago - an issue only for the highly industrialised states of the region and that mainly involving, 'less hazardous', dredged materials rather than industrial waste.

5.2.2.4. Reporting under the Basel and Bamako Conventions.

Under the Basel Convention, the Parties have the duty to supply information relating to wastes defined as hazardous in national legislation, in addition to these listed in the Annexes, and any requirements concerning transboundary movement procedures applicable to such wastes, that must be carried out within six months of becoming a Party to the Convention, and any subsequent changes (Art.3); the designation of the agencies acting as focal points and their competent authorities, which must be effected and notified within three months of the date of the entry into force of the Convention for them, and all changes regarding this designation (Art.5(2) and (3)); decisions to consent totally or partially to the import of hazardous or other wastes for disposal within

¹¹¹ (...continued)
see LC, *op.cit.* n.110.

¹¹² See LC, Report of the Sixteenth Consultative Meeting, LC 16/14, 15 December 1993, p.7.

¹¹³ See LC, Final Report on Permits Issued in 1985 and 1986, LC.2/Circ.339, 8 August 1994.

¹¹⁴ *Ibid*, Annex 1, p.2 and Annex 2, p.2.

¹¹⁵ *Ibid*, Annex 1, p.3 and Annex 2, p.3.

¹¹⁶ *Ibid*, Annex 1, p.4 and Annex 2, p.3.

the area under their national jurisdiction (Art.13(2)(c)); decisions to limit or ban the export of hazardous wastes (Art.13(2)(d); copies of each notification concerning any given transboundary movement of hazardous wastes and the response to it, when a Party that may be affected by that movement has requested so (Art.13(4)); and any accidents occurring during the transboundary movement of hazardous wastes, which are likely to present risks to human health and the environment in other states (Art.13(1)).

The more general reporting obligation involves submission of an annual report containing information on the designated competent authorities and focal points; on the transboundary movement of wastes in which they have been involved, including the amount of wastes exported, their category, characteristics, destination, any transit country and disposal method as stated on the response to notification, the amount of wastes imported with the previously mentioned details, disposals which did not proceed as intended, and efforts to achieve a reduction of the amount of hazardous wastes subject to transboundary movement; on the measures adopted in implementation of the Convention; on available qualified statistics which have been compiled by them on the effects on human health and the environment of the generation, transportation and disposal of wastes; on bilateral, multilateral and regional agreements and arrangements entered into; on accidents occurring during transboundary movement and disposal and on the measures undertaken to deal with them; on disposal options operated within the area of their jurisdiction; on measures undertaken for development of technologies for the reduction and/or elimination of production of wastes; and on any other matters that the Conference of the Parties will deem relevant (Art.13(3)). Almost identical requirements are laid down in Article 13 of the Bamako Convention.

Importantly, any Party which has information indicating that another Party is in breach of its conventional obligations is under a duty to inform the Secretariat thereof and the interested Party (Basel, Art.19; Bamako, Art.19). Relevant reports are transmitted through the Secretariat to the Conference of the Parties which is the body responsible for reviewing effective implementation of each Convention (Basel, Art.15; Bamako, Art.15). Interestingly, the Bamako Convention assigns the Secretariat with the power and duty to verify such allegations and submit relevant reports.

The latter instrument also provides for a 'Dumpwatch' (Art.5(4)), but its exact function is not determined; it is just stated that it has to be a national body and co-ordinate its activities with other governmental and non-governmental bodies. It seems reasonable to expect that these organs' work would have some affinity with that of the Secretariat in verifying alleged violations. In any case, as the Convention has just recently entered into force, all the above provisions have yet to be tested in practice.

On the other hand, the Secretariat of the Basel Convention - soon after the latter's entry into force (24 May 1992) - gave signs of a commendable activity with regard to the gathering and transmission of information provided by the Parties. Acknowledging the special importance of the

information provided through reporting for the implementation of the treaty rules, the Secretariat diligently compiles the information received and publishes it,¹¹⁷ for use “not only by its Contracting Parties, but also by third states, interested organisations, private sector, industry and NGOs”.¹¹⁸ This effort can serve as a guiding example for other environmental regimes, and especially those having to deal with technical and complex information of the Basel type, and facing considerable difficulties in producing a comparable work, notably in the context of IMO instruments.

Having said that, when one turns to the substance of reporting under the Basel Convention, as carried out so far, a less ideal picture emerges. From the sixty-eight states bound by the Convention by 1994, thirty provided some kind of information pursuant to Article 13; only two from the then thirteen Mediterranean Parties appear in this list, namely Syria and Cyprus, which have submitted reports for 1993. The record is not impressive as far as the quality and quantity of transmitted information is concerned either. Thus, Syria only communicated its adoption of a total ban on the import of hazardous wastes;¹¹⁹ while Cyprus referred to a draft law and relevant regulations, whereby “the import of hazardous wastes is to be strictly controlled”, without further specifications.¹²⁰ The latter also provided some data on the quantities of hazardous wastes generated in the country; on the national measures taken for the reduction of production of such wastes; on the disposal options operating within its area of jurisdiction; on a comprehensive study, in the framework of METAP,¹²¹ concerning hazardous wastes management in the country, and on the basis of which future measures are currently at the planning stage; and on a polluting incident that occurred in Cyprus in 1987, during transboundary movement and disposal of PCB.¹²² However, the situation is improving with time; in the last report compiled by the Secretariat more or less complete data were received by ten Mediterranean countries, namely Croatia, Cyprus, Egypt, Greece, Morocco, Slovenia, Spain, Syria, Tunisia and Turkey.

Having examined all the reporting mechanisms of the major treaty regimes applicable in the Mediterranean, a common overall pattern seems to emerge: Notwithstanding extensive relevant requirements and efforts within various institutions to facilitate and promote submission of reports, states prove disinclined to provide the required information; even when they do so, both quality and adequacy of reports submitted is sub-standard. At the same time, the organs responsible to put data

¹¹⁷ UNEP, Basel Convention Secretariat, Reporting and Transmission of Information Required under the Basel Convention - Compilation of Information Received May 1992 - March 1994, UNEP/SBC/94/7, Geneva, June 1994; latest issue, UNEP, Basel Convention Secretariat, Reporting and Transmission of Information under the Basel Convention for the Year 1997, Basel Convention Series/SBC No:99/011, Geneva, October 1999.

¹¹⁸ UNEP, 1994, *op.cit.* n.117, p.i.

¹¹⁹ *Ibid.*, p.6.

¹²⁰ *Ibid.*, pp.5 and 7.

¹²¹ See *infra*, Chapter 6, p.281-3.

¹²² UNEP, 1994, *op.cit.* n.117, pp.26, 25, 23, 16 and 18, and 22 respectively.

gathered into effective use remain mostly inactive.

5.2.3. Co-operative Supervision - The Paris MOU.

Building on customary law-of-the-sea principles and the LOSC, fourteen Western European states decided in 1982 to put in place a co-operative network of maritime authorities in order to enhance the effectiveness of their port control systems in dealing with sub-standard ships. Pursuant to the then-signed Paris Memorandum of Understanding on Port State Control in Implementing Agreements on Maritime Safety and Protection of the Marine Environment,¹²³ the maritime authorities of each contracting Party have to maintain such a system and carry out methodical inspections on board ships, with the purpose of ensuring that they comply with international standards set out in six conventions (Section 1.2),¹²⁴ including MARPOL, and other listed IMO documents setting out procedures or guidelines (Section 2.1-2), without discrimination to flags.¹²⁵ It must be noted, however, that each port authority undertakes to apply only those instruments in force and to which the relevant country is a party (Sections 2.3, 8.1); consequently, the Paris MOU does not in effect create a uniform package of standards, unless all states actively adopt the said instruments as part of their domestic law, which is not the case as yet.¹²⁶

It should also be clear that, although usually viewed as an enforcement mechanism, the Paris MOU is merely a regime of co-operative supervision concluded among national maritime authorities, in view of the fact that under this instrument no formal proceedings are opened or penalties imposed by port authorities in case a violation or deficiency is detected. That, of course, does not preclude the exercise of the port states' enforcement powers in pursuance of international conventions or national legislation,¹²⁷ but the fact remains that the Paris MOU Parties simply undertook to co-operate in a harmonised system of inspection and not to enter into new contractual

¹²³ See generally G.C.Kasoulides, *Port State Control and Jurisdiction: Evolution of Port State Regime*, 1993. The Parties of the Paris MOU are the maritime authorities of: Belgium, Denmark, France, Germany, The Netherlands, Norway, Sweden, United Kingdom, Finland, Ireland, Greece, Italy, Portugal and Spain; in 1989 the USSR, succeeded by the Russian Federation, and in 1993 and 1994, Poland and Canada respectively joined the regime. There is also a number of 'co-operating maritime authorities', namely of the USA, Croatia and Japan.

¹²⁴ Namely, the 1974 SOLAS, which lays down uniform rules of navigation, machinery, and in general construction of ships; MARPOL; the 1972 COLREG, which lays down rules and procedures for vessel conduct and movement, and authorises IMO to adopt non-mandatory traffic separation schemes; the 1966 Convention on Load Lines, which determines loading limits for vessels above a certain tonnage; the 1976 Convention Concerning Minimum Standards in Merchant Ships (ILO Convention 147); and the 1978 Convention on Standards, Training, Certification and Watchkeeping for Seafarers, the last two aiming at ensuring that crews are adequately trained and that conditions of work on board ships as such that risk of accidents "due to human error" are minimised.

¹²⁵ On the discussion this provision has provoked, see Kasoulides, *op.cit.* n.123, pp.155-7.

¹²⁶ Significantly, port authorities have to make sure that 'no more favourable treatment' is given to ships flying the flag of states that have not become parties to the various instruments (Section 2.4; Annex 1, Section 1.3), which means that these ships are expected to comply with the same international standards, see *ibid.*, p.152.

¹²⁷ It appears that no such proceedings had been initiated at least during the first years of the Paris MOU's operation, see *ibid.*, p.158.

and binding obligations.¹²⁸

In that context, their underlying objective was to effectively restrict operation of sub-standard vessels in Paris MOU waters, while at the same time leaving intact the primacy of flag state responsibility for such compliance (Fourth preambular paragraph). To achieve this purpose, they take advantage of the fact that the private actors targeted by international regulation habitually enter various jurisdictions in the course of their business. Consequently, it is possible to directly supervise them, certify any breaches committed and communicate the relevant data to the other participants in the network, without awaiting for classic flag state action to be undertaken and reported through relevant treaty mechanisms.

The key points of this regime are the duty of inspection by qualified surveyors (Section 3.5),¹²⁹ particularly of ships which may present a special hazard, such as oil tankers and gas and chemical carriers, and of ships that have had 'several recent deficiencies' (Section 3.3), and the power to detain a ship from proceeding to sea in case repairs are needed (Section 3.6-8).¹³⁰ Inspection basically consists of checking the ship's documents; further inspection action may be undertaken only if valid documents are absent or when there are 'clear grounds' for believing that they do not substantially meet pertinent requirements (Section 3.1), especially when a report or notification by another port authority, or a complaint by the master, crew member, or any interested person or organisation, has been received (Section 3.2). When inspection is concluded, the port authorities have to provide the master with a document of a specific form giving the results of the inspection and details of any action taken (Section 3.10, Annex 3). Port authorities are in principle to abstain from further inspecting a vessel found faultless for a period of six months (Section 3.4).

The Port State Control Committee (PSCC) is the main executive body of the Paris MOU assigned with the general task of reviewing the operation and effectiveness of the arrangement, the promotion of the harmonisation of relevant procedures and practices, the drawing up of guidelines for carrying out inspections, the development of procedures for the exchange of information etc. (Section 6.3).¹³¹ SIRENAC (Système d'Information relatif aux Navires Contrôlés) is the most vital element of the regime and was initially laid out as an 'open' system allowing for considerable

¹²⁸ See *ibid*, p. 151.

¹²⁹ In this context, seminars for surveyors have been regularly organised, with regular financial assistance from the EU. They aim at promoting harmonisation of inspection procedures throughout the region and a *forum* for experience exchange and discussion. Over the years the seminars have served to identify problems related to enforcement; in the event that such problems cannot be solved *in situ*, the matter is submitted to the PSCC, which then either makes a policy decision or refers the matter to IMO, see Paris MOU, 1992 *Annual Report*, p. 19.

¹³⁰ There are in fact considerable variations between Parties in their detention frequencies and practices, see EC, Common Policy on Safe Seas, *Port State Control in Europe*, 1993, pp. 41-2.

¹³¹ There is also a Secretariat to assist the Committee and facilitate exchange of information (Section 6.4), and a Computer Centre, located at Saint-Malo, France, where all inspection records are inserted into a common file and thus made accessible to all Parties (Section 4, Annex 4). The system is still developing so as to permit quick and easy exchange of information and follow-up and eliminate duplicate inspections and delays of the same vessel, see Kasoulides, *op.cit.* n. 123, pp. 150-1.

freedom for individual operators to enter updates to it. Its operation, however, showed that procedures had to be strictly disciplined and harmonised to the maximum possible extent to make data comparable and useful.¹³² Under its completely re-designed phase, the system - which is now called SIRENAC-E and became operational in 1993 - is expected to become more user-friendly and refine the collection of data and the resulting quality of statistical material. It is interesting to note in this context that in order to improve mandatory reporting to the IMO of port states' interventions, as required by relevant instruments, and to alleviate the administrative burden on port states' administrations, much effort has been put in adjusting the port state control inspection report into a format which may be used for dual purposes,¹³³ in the hope to increase the number of port state reports to the IMO.

Having said that, access to the information gathered was initially resisted by the Parties, because "the... assumption that every detained ship would imply a sub-standard ship would not necessarily have to be valid".¹³⁴ Therefore, in principle only the overall data was released and no disclosures that could stigmatise owners or operators were made. Nevertheless, the demands of inter-regional co-operation, development of SIRENAC-E, and increased political attention caused by accidents led to a reversal of this policy:¹³⁵ In 1993, it was decided that third parties with a direct interest in the operation of a ship, such as flag states and shipowners, could be provided with relevant information against reimbursement of expenses incurred. In subsequent years, there was a further relaxation of this process to the point that today detention lists can be found in Lloyd's List and even on the Internet.

As far as actual operation of the agreement is concerned, each port authority undertook to achieve an annual total of inspections of 25% of the estimated number of foreign vessels which entered its ports during the preceding twelve month period, within three years from the coming into force of the instrument (Section 1.3). Although this target took a long time to be reached, it was finally realised in 1993.¹³⁶ On the other hand, regional coverage, i.e. the percentage of inspected ships in the region as a whole, is thought to be around 85%. This is a rather large figure which has even led to countries in the periphery of the region indicating that they find it increasingly difficult to select ships which have not yet been inspected - what is called the 'end-of-the-line effect'.¹³⁷

Now, under Section 3.3 of the Paris MOU, priority in inspections is given to certain ship

¹³² To this effect, regular meetings of the competent officers are held, see Paris MOU, *op.cit.* n.129, p.20.

¹³³ See *ibid.* p.25.

¹³⁴ See Paris MOU, 1993 Annual Report, p.19.

¹³⁵ See *ibid.* pp.19-20.

¹³⁶ See Paris MOU, *op.cit.* n.134, p.29.

¹³⁷ See Paris MOU, *op.cit.* n.129, pp.4 and 32. In these ten years, some 125,000 inspections on 95,000 ships had been carried out, while over 4,000 ships were detained for unseaworthiness. The cost to maritime administrations was calculated at ECU 20 million (≈\$25 million), whereas the shipowners loss of revenue due to detentions was estimated to amount to ECU 120 million.

types, on the grounds that they involve intrinsic dangers related to the numbers of persons on board or the nature of the cargoes carried. The flag has not been a selection criterion which seemed inconsistent with the provision of Section 1.2. In view of various suggestions, especially from the EC Commission to improve the effectiveness of port state control by making more selective use of available resources, the PSCC found it necessary to review the 'non-discrimination as to flag' principle.¹³⁸ Hence, it is now not considered contradictory with this principle, if the parties identify ships or flag states "with a notorious deplorable safety record" as priority cases for inspection.¹³⁹ Nevertheless, it was decided that the assessment of flag states liable of being placed on the priority list should be carried out with extreme care and as objectively as possible; consequently, it was thought appropriate to nominate those states which had shown an above average detention record in the last three consecutive years. Assessment of the priority list - which in the future seems likely to be based on other relevant criteria as well - is entrusted to a subsidiary organ, the Working Group on Harmonization,¹⁴⁰ while final adoption rests with the PSCC. An amendment of the Paris MOU to that effect was made, and the first list published in 1993.¹⁴¹ A Mediterranean country, namely Syria, was the leader of the relevant chart with detentions in 25% (51.85% in 1993) of its ships that were inspected from 1991 to 1993 - as compared with an average rate of 6.41%.¹⁴²

As far as operational discharges are concerned, however, the Paris MOU does not fully utilise the LOSC provisions. Hence, under Section 5, port authorities are urged to collect evidence for infringements of traffic separation schemes and discharge offences when requested by another authority and in relation to activity within the jurisdiction of the latter, but they cannot prosecute in such instances, nor when they have obtain evidence of high seas violations. Nonetheless, in the Fourth Ministerial Conference on Port State Control (Paris, 14 March 1991), it was decided to act on the control of compliance with operational requirements, in order to address the results of investigations of recent major shipping disasters, which demonstrated that these were due to human failure, including non-compliance with or even non-existence of adequate operational standards, rather than to failing of shipboard equipment.¹⁴³ IMO followed with Assembly Resolution A.681(17), which provides port states the first opening to exercise control on compliance with operational requirements, while formal amendments to MARPOL are under consideration. In the early stages after this evolution, most surveyors showed some reluctance, mainly due to inexperience

¹³⁸ See *ibid*, pp.23-4.

¹³⁹ See Paris MOU, Annex 1, at Section 1.2 as amended

¹⁴⁰ This is a working group to monitor implementation matters. It held its first session in early 1993, and is currently working on specifying uniform detention criteria, as different authorities adhere to different detention procedures, and a uniform definition of a 'sub-standard' ship, see Paris MOU, *op.cit.* n.134, pp.22-3.

¹⁴¹ *Ibid*, p.49.

¹⁴² Syria is by no means the only Mediterranean country that figures on the list and is targeted as a priority case: Morocco (13.64%), Egypt (12.57%), Lebanon (12.50%), Malta (12.26%), Cyprus (10.83%), Turkey (10.15%) and Algeria (10.08%) also have an unreputable record.

¹⁴³ Paris MOU, *op.cit.* n.129, p.6.

in this field, but as more experience is gained over the years confidence is being built.¹⁴⁴

The overall lesson learned from the first fifteen years of the Paris MOU seems to be that no one region can eradicate the operation of sub-standard ships by itself. The best possible result it could achieve is to keep them at arm-length, ready to re-enter only when the commercial benefits of the shipowner exceed the risk of his ships being detained. As soon as that happens, they appear to return in an even more deteriorated state.¹⁴⁵ This also largely explains the increasing trend in detentions noted over the last few years. That said, the number of inspections does not give an unequivocal indication of the effectiveness of the Paris MOU, especially due to the 'at random' pattern thereof.¹⁴⁶ Generally, there is an increasing trend in delays and detentions.¹⁴⁷ Deficiency rates, i.e. rates between the number of deficiencies and the number of inspections or of individual ships involved, also increase.¹⁴⁸ This phenomenon is mainly attributed to deterioration of an increasingly ageing fleet; whereas flagging out to flags of convenience, and attempts to save money in manning and maintenance have accelerated it.¹⁴⁹ Nevertheless, changes in detention procedures, and the more careful selection of ships for inspection may also account for the trend,¹⁵⁰ gradually making the Paris MOU mechanism more focussed and effective.

All said, co-operation under the Paris MOU, setting aside on-going shortcomings in computerising the system of inspections and ensuring adequate information exchange,¹⁵¹ is positively evaluated.¹⁵² It must be noted in this connection, that Directive 95/21 concerning the enforcement, in respect of shipping using Community ports and sailing in the waters under the jurisdiction of the Member States, of international standards for ship safety, pollution prevention and shipboard living and working conditions (the Port State Control Directive), shares exactly the same objectives as the Paris MOU, i.e. to harmonise inspection and detention criteria and thus mitigate strategic selection of European Union ports by sub-standard ships,¹⁵³ and effectively duplicates the provisions of the latter so as to cover all Member States territory.

¹⁴⁴ See *ibid*, p.21.

¹⁴⁵ *Ibid*, p.5.

¹⁴⁶ See also Paris MOU, *op.cit.* n.134, p.16, on the difficulties that the Working Group on Harmonization finds in assessing the regime's effectiveness.

¹⁴⁷ See Paris MOU, *op.cit.* n.129, pp.31-3.

¹⁴⁸ MARPOL equipment flows - mostly related to Oil Record Books, retention-of-oil-on-board systems, oily-water separators, and oil-discharge-monitoring-and-control systems - gradually multiply as well; in 1993, they accounted for 4.65% of the total, see Paris MOU, *op.cit.* n.134, p.47.

¹⁴⁹ See *ibid*, pp.30-2.

¹⁵⁰ *Ibid*, pp.32-3. This is supported by the spectacular increase in the number of deficiencies noted in 1993 (48.46% of the total inspections).

¹⁵¹ See EC, *op.cit.* n.130, p.43.

¹⁵² See Declaration of the 1986 Ministerial Conference on Port State Control - 'Safe Ships on Clean Seas', Paris MOU, 1986/87 *Annual Report*, Annex 7; and Fourth Ministerial Conference on Port State Control, Declaration on Safe Operation of Ships and Pollution Prevention, 1991, reprinted in Kasoulides, *op.cit.* n.123, Annex V.

¹⁵³ See E.M.Berggren, 'New EC Directive on Port State Control', 5(2) *R.E.C.I.E.L.*, 1996, pp.181-2.

The success of the Paris MOU has, moreover, led to wide-spread response to an IMO Assembly invitation to develop respective arrangements in other parts of the world.¹⁵⁴ Such initiatives are being taken in the context of the 1992 IMO Global Programme for the Protection of the Marine Environment aiming at assisting developing countries in ratifying, implementing and enforcing international standards by building indigenous capacities.¹⁵⁵ In this context, preparation began in 1994 for the conclusion of such an agreement for the Southern and Eastern Mediterranean, which would be a fruitful expansion of the model in the entirety of the Mediterranean region, since it is apparently considered that the great gap in economic and infrastructure development in the South and the East do not allow for an actual adherence of these countries in the European regime. The Memorandum of Understanding on Port State Control in the Mediterranean Region (Mediterranean MOU) was eventually signed in 1997 by maritime authorities of Algeria, Cyprus, Egypt, Israel, Malta, Morocco, Tunisia and Turkey.¹⁵⁶ The Mediterranean MOU allows for an *interim* period of two years prior to its full implementation in order to put in place an effective system of port state control in each participating country that would be able to carry out inspections at 15% of the estimated total number of foreign merchant ships entering the ports during the year. During this period, IMO and the European Commission are to support a technical co-operation programme to train surveyors and inspectors of the countries involved.

Despite these positive developments, it is apparent that such a mechanism can only apply in the area of shipping, as it is based on an assumption that the target of supervision moves through various jurisdictions that exchange information and form a control network difficult to bypass. Unfortunately, in other areas of marine pollution regulation, especially in relation to land-based sources, this course of action is simply impossible, since polluting activities are carried out almost entirely within a single jurisdiction.

5.3. Non-Compliance Procedures.¹⁵⁷

The processes described in the previous Sections can be considerably tightened by introducing stricter and more formalised 'non-compliance procedures', which might involve, for instance, compulsory and more independent inspection and monitoring; introduction of complaints

¹⁵⁴ Hence, three similar agreements are in place to date, namely the 1992 Latin American Agreement of Cooperation on Port State Control (Acuerdo de Vina del Mar); the 1993 Asian-Pacific and the 1996 Caribbean Agreements for Cooperation on Port State Control, see F.Plaza, 'Port State Control: Towards Global Standardization', 1994(1) *IMO News*, pp.13-20.

¹⁵⁵ See 'IMO Global Programme Helps Fight against Pollution', 1993(2) *IMO News*, pp.14-7.

¹⁵⁶ See IMO/FAX8/1997.

¹⁵⁷ On the role of non-compliance procedures, see, among others, G.Handl, 'Controlling Implementation of and Compliance with International Environmental Commitments: The Rocky Road from Rio', 5 *Colo.J.Int'l Env't L. & Pol'y*, 1994, pp.327-30.

channels;¹⁵⁸ increased use of independent data to supplement and correct national reports coupled with the establishment of independent compliance review bodies;¹⁵⁹ and/or firm organisational links between the different supervision techniques applied in a given treaty system so as to form what may be called a 'supervision package'.¹⁶⁰

The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer is, in many aspects, a very advanced international regime that pays particular attention to compliance control and enforcement issues. In this connection, it is indicative that it features provisions, in the form of trade restrictions, that make it enforceable even against non-parties (Art.4).¹⁶¹ Be that as it may, by 1990 it was realised that the reporting procedure did not function as planned, as many Parties were not forthcoming with complete data. This provoked considerable discussion and even calls to extend trade restrictions to non-complying Parties, including those failing to submit data.¹⁶² In response, the Montreal Protocol Meeting of the Parties took prompt steps to address these concerns: It established an *Ad Hoc* Group of Experts on Reporting which found out that the majority of non-reporting states were developing countries basically unable to comply without technical assistance from the treaty organisation,¹⁶³ and immediately afterwards introduced a formal 'non-compliance procedure'.

The 'non-compliance procedure' under Article 8 of the Protocol provides a unique paradigm in international environmental law.¹⁶⁴ It makes the Montreal Protocol a 'self-contained regime',¹⁶⁵ that possesses a concrete formalised mechanism to monitor and correct deviations from legal prescriptions. According to it, any Party having a reservation as to another state's implementation of obligations under the Protocol, or indeed any party that finds itself, despite its best efforts unable to fully comply with its obligations may submit relevant information to the Secretariat and through it to the Implementation Committee.¹⁶⁶ This is a subsidiary body established

¹⁵⁸ See A.Hurrell & B.Kingsbury, 'The International Politics of the Environment: An Introduction', in A.Hurrell & B.Kingsbury (eds.), *The International Politics of the Environment*, 1992, pp.27-8.

¹⁵⁹ See O.Greene, 'International Environmental Regimes: Verification and Implementation Review', 2(4) *Env'tl Politics*, 1993, pp.155-73.

¹⁶⁰ See Sachariew, *op.cit.* n.7, pp.50-1.

¹⁶¹ See B.Baker, 'Eliciting Non-Party Compliance with Multilateral Environmental Treaties: U.S. Legislation and the Jurisdictional Bases for Compliance Incentives in the Montreal Ozone Protocol', 35 *German YB.I.L.*, 1992, pp.333-65.

¹⁶² See E.P.Barratt-Brown, 'Building a Monitoring and Compliance Regime under the Montreal Protocol', 16 *Yale J.Int'l L.*, 1991, pp.542-3.

¹⁶³ UNEP, Report of the First Meeting of the Ad Hoc Group of Experts on the reporting of data, UNEP/OzL.Pro/WG2/1/4, 7 December 1990.

¹⁶⁴ For an account of its evolution, see M.Koskenniemi, 'Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol', 3 *YB.I.E.L.*, 1992, pp.128-34; and D.G.Victor, 'The Operation and Effectiveness of the Montreal Protocol's Non-Compliance Procedure', in D.G.Victor *et al* (eds.), *op.cit.* n.91, pp.137-76.

¹⁶⁵ See *supra*, Chapter 4, p.148.

¹⁶⁶ See Decision II/5, in UNEP, Report of the Second Meeting of the Parties to the Montreal Protocol on substances that deplete the ozone layer, UNEP/OzL.Pro.2/3, 29 June 1990; and Decision IV/5 and Annexes IV and V, in UNEP, Report of the Fourth Meeting of the Parties to the Montreal Protocol on substances that deplete the ozone layer, (continued...)

by the Second Meeting of the Parties and consisting of ten members elected on the basis of equitable geographical distribution and for a two-year term. It has the mandate to receive, consider and report on allegations of breaches of the Protocol, and any information or observations submitted by the Secretariat in the course of preparation of annual reports based on information furnished by the Parties. It should be noted, however, that all information submitted can be classified as confidential. The Committee is also empowered, at the invitation of the Party concerned, to carry out its own investigations within the territory of the latter.

In effect, the Implementation Committee acts as an intermediate between the Meeting of the Parties and countries facing problems in implementing their commitments and seeks solutions to these problems. In this relation, a very important aspect of its work consists in close co-operation and exchange of information with the Multilateral Fund for matters related to the provision of financial and technical assistance to developing countries. The Multilateral Fund for the Implementation of the Montreal Protocol is the permanent financial mechanism established by the Fourth Meeting of the Parties.¹⁶⁷ It is financed by developed-country Parties and allows for bilateral and agreed regional co-operation to be considered as a contribution as long as it relates to compliance with the Protocol, provides additional resources and meets incremental costs. More specifically, it covers the "agreed incremental costs" of developing countries ozone-protection programmes on a grant or concessional basis; finances clearing-house functions to assist in identifying co-operation needs, to facilitate technical co-operation, to distribute information, to hold workshops and facilitate and monitor other co-operation available; and funds its secretarial services. Almost all developing-country Parties - to the extent their annual consumption of controlled substances remains below certain limits - are eligible for assistance; should one Party not be eligible, it may still obtain support from the Global Environment Facility (GEF) for implementing the provisions of the Montreal Protocol.¹⁶⁸ The existence of the Multilateral Fund is consequently very important, as it provides a strong incentive for state to fulfil their commitments according to schedule if they wish to receive financial support.¹⁶⁹

It is very characteristic of the direct relevance of this mechanism to control over compliance with the Protocol, and of the close interaction between the former and the non-compliance mechanism of the ozone regime, that the Implementation Committee regularly hears comments and advice from officials responsible for the administration of the Multilateral Fund, i.e. the

¹⁶⁶(...continued)

UNEP/OzL.Pro.4/15, 25 November 1992.

¹⁶⁷ See UNEP, 1994, *op.cit.* n.166, Decision IV/17. The World Bank through its Ozone Projects Trust Fund (OTF), UNDP and UNEP are again the implementing agencies. By 1995, the Fund had provided \$145 million for 24 projects in 20 developing countries, see World Bank/IBRD, *Mainstreaming the Environment - The World Bank Group and the Environment since the Rio Earth Summit - Fiscal 1995*, 1995, p.70.

¹⁶⁸ See UNEP, Note by the Ozone Secretariat, UNEP/OzL.Pro.1994/Inf.2, 1 December 1994, p.2.

¹⁶⁹ See Barratt-Brown, *op.cit.* n.162, p.539.

implementing agencies, the Fund Secretariat, and the GEF Secretariat.¹⁷⁰ Moreover, the Fund's implementing agencies prepare reports reviewing all the problems encountered in data-reporting, and thus significantly promote the work of the Implementation Committee.¹⁷¹ In the same vein, data submitted to the Fund Secretariat in relation to progress made in implementing projects included in the country programmes is consolidated and verified against those submitted by the Parties to the Ozone Secretariat;¹⁷² this way, relevant information is cross-checked and any discrepancies investigated. But the most clear-cut link between compliance control and funding is reflected in the decision to condition the provision of assistance on proper fulfilment of the obligation to supply baseline data, and a threat to extend that requirement to the duty to make further reports on annual data.¹⁷³

Through this complex mechanism, the Committee is able to operate as a dispute settlement *forum* - importantly without prejudice to the possibility of resorting to traditional means of dispute settlement - with a view to reaching "an amicable resolution of the matter on the basis of respect for the provisions of the Protocol". In any case, it has to report to the Meeting of the Parties, which has the ultimate authority to decide any measures it deems appropriate to bring about full compliance with the Protocol. After receiving a report by the Committee the Meeting may, taking into consideration the circumstances of the matter, decide upon and call for steps to bring about full compliance, including measures to assist Parties, and to further the Protocol's objectives. There is an indicative list of measures that can be taken encompassing:

- Appropriate assistance, including assistance for the collection and reporting of data, technical assistance, technology transfer and financial assistance, information transfer and training;
- Issuing cautions; and
- Suspension, in accordance with the applicable rules of international law concerning the suspension of the operation of a treaty, of specific rights and privileges under the Protocol, whether or not subject to time limits, including those concerned with industrial rationalisation, production, consumption, trade, transfer of technology, financial mechanism

¹⁷⁰ See, e.g., UNEP, Montreal Protocol Implementation Committee, Report of the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol on the work of its Sixth Meeting, UNEP/OzL.Pro/ImpCom/6/3, 26 August 1993, pp.2-4; Report of the Implementation Committee... on the work of its Eighth Meeting, UNEP/OzL.Pro/ImpCom/8/3, 4 July 1994, pp.2-6; Report of the Implementation Committee... on the work of its Thirteenth Meeting, UNEP/OzL.Pro/ImpCom/13/3, 28 March 1996, pp.11-2; and Report of the Implementation Committee... on the work of its Fourteenth Meeting, UNEP/OzL.Pro/ImpCom/14/4, 26 August 1996, pp.13-4.

¹⁷¹ See UNEP, Montreal Protocol Implementation Committee, Report of the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol on the work of its Twelfth Meeting, UNEP/OzL.Pro/ImpCom/12/3, 21 December 1995, pp.9-10.

¹⁷² See UNEP, Report of the... Thirteenth Meeting, *op.cit.* n.170, p.12.

¹⁷³ See D.G.Victor, 'The Montreal Protocol's Non-Compliance Procedure: Lessons for Making Other International Environmental Regimes More Effective', in W.Lang (ed.), *The Ozone Treaties and their Influence on the Building of International Environmental Regimes*, 1996, p.77.

and institutional arrangements.

In 1998, the Montreal parties decided to fine-tune the non-compliance mechanism and adopted some minor amendments to that effect.¹⁷⁴ These mainly relate to time limits for the submission of communication, to participation in the Implementation Committee, and to extending the mandate of the latter to cover identification of the facts and possible causes relating to individual cases of non-compliance.

This arrangement seems to produce results,¹⁷⁵ and be as flexible as it should, considering its essentially political nature. One factor thought to contribute to this success is the fact that the Implementation Committee spent its formative years dealing with reporting failures thus gaining experience and establishing its place and reputation within the Montreal Protocol system without tackling sensitive substantive non-compliance cases.¹⁷⁶ In fact, it was only in 1995 that the procedure was for the first time invoked in relation to formal submissions for non-compliance by five East European countries, namely Belarus, Bulgaria, Poland, Russia and Ukraine.¹⁷⁷ The measures that the Meeting of the Parties has adopted to date to correct the situation consist of appropriate assistance that is hoped to help the laggard countries come into line. However, after several years have passed, and despite the progress achieved, full compliance is not effected and the above-mentioned countries, except Poland, together with Estonia, Latvia, Lithuania, Uzbekistan and Turkmenistan have recently been cautioned that they may face the sanctions available to the Parties.¹⁷⁸ This is a new phase of maturity for the mechanism; the precise modalities and especially the repercussions of such measures, if they are eventually taken, will be a very significant and innovative development for international environmental law in general.

Having said that, another factor that has contributed to the effectiveness of this process so far is the fact that the Committee handles specific cases of non-compliance and does not deliberate only on broad issues,¹⁷⁹ such as those addressed by the MEPC and FSI. The impressive number of compliance-related decisions adopted by consensus at the Seventh Meeting of the Parties are characteristic of the importance attached to these problems in the ozone regime and the significant

¹⁷⁴ UNEP, Report of the Tenth Meeting of the Parties to the Montreal Protocol on substances that deplete the ozone layer, UNEP/OzL.Pro.10/9, 3 December 1998, Decision X/10 and Annex II.

¹⁷⁵ See, e.g., Report of the President of the Implementation Committee, in UNEP, Report of the Seventh Meeting of the Parties to the Montreal Protocol on substances that deplete the ozone layer, UNEP/OzL.Pro.7/12, 27 December 1995, at paras.35-44.

¹⁷⁶ See Victor, *op.cit.* n.173 ,p.61.

¹⁷⁷ See *ibid*, pp.59-61.

¹⁷⁸ See UNEP, *op.cit.* n.174, Decisions X/21, X/23-28; and UNEP, Report of the Eleventh Meeting of the Parties to the Montreal Protocol on substances that deplete the ozone layer, UNEP/OzL.Pro.11/10, 17 December 1999, Decisions XI/24-25.

¹⁷⁹ See Victor, *op.cit.* n.173, p.66.

contribution of the focussed work of the Implementation Committee to that effect.¹⁸⁰

However, experience has also revealed the difficulties involved in such an evolution. Koskenniemi, for one, is even sceptical of its ultimate value, suggesting that the procedure established is of an adversarial nature,¹⁸¹ and in risk of being "used to enforce obligations which leave room for interpretation and to castigate *bona fide* application or excusable non-performance and to deepen the parties' political and economic disagreements", or even of becoming "an ineffective bureaucracy within which parties may hide the real difficulties they have in performing their obligations while avoiding judicial or arbitral scrutiny, or more subtle forms of diplomatic persuasion to bring about conforming behaviour".¹⁸² He also points out to the complicated legal issues involved in such an innovatory process that tries to deal in an *ad hoc* manner - leaving several issues unclear - with concepts and procedures, such as wrongfulness and breach of obligation, or even dispute settlement, for which international law has in place a long-established, albeit unsatisfactory, set of rules.¹⁸³ Nonetheless, other analytical attempts come to justify the comparative legal autonomy of sectoral environmental regimes,¹⁸⁴ and even suggest that there is an emerging set of distinct procedural principles on compliance control in international environmental law.¹⁸⁵

These considerations, although intriguing in themselves, will have to be reinforced by the actual operation of the non-compliance procedure, especially in view of the possibility to have some type of sanctions imposed in the near future. Nevertheless, the rather 'secret' and confidential nature of deliberations in the Implementation Committee brings attention to the relevance of another line of criticism developed during the period of formation of the procedure. In 1991, there were already voices calling for the formal accommodation of NGO participation in the process, for transparency

¹⁸⁰ See UNEP, *op.cit.* n.175, Annex VII. These are: Decision VII/14 on the Implementation of the Protocol by the Parties; Decision VII/15 on Compliance with the Montreal Protocol by Poland; Decision VII/16 on Compliance with the Montreal Protocol by Bulgaria; Decision VII/17 on Compliance with the Montreal Protocol by Belarus; Decision VII/18 on Compliance with the Montreal Protocol by the Russian Federation; Decision VII/19 on Compliance with the Montreal Protocol by Ukraine; Decision VII/20 on Discrepancy between the data reported by a Party to the Ozone Secretariat and the data presented by that Party to the Executive Committee of the Multilateral Fund; and Decision VII/33 on Illegal imports and exports of controlled substances. See especially the discussion generated by Russia's inability to carry out its commitments without financial support. For the follow-up to these Decisions and the gradually improving compliance record of Russia, see UNEP, Report of the Eighth Meeting of the Parties to the Montreal Protocol on Substances that deplete the ozone layer, UNEP/OzL.Pro.8/12, 19 December 1996, at VI; and UNEP, Report of the Ninth Meeting of the Parties to the Montreal Protocol on substances that deplete the ozone layer, UNEP/OzL.Pro.9/12, 25 September 1997, at V.

¹⁸¹ Koskenniemi, *op.cit.* n.164, p.131. On the contrary, Victor argues that experience with the actual operation of the procedure shows that "there is some danger that too much is made of the need to be non-adversarial", *op.cit.* n.173, p.70.

¹⁸² See Koskenniemi, *op.cit.* n.164, p.133. For the view that these concerns are rather exaggerated, see Handl, *op.cit.* n.157, pp.329-30.

¹⁸³ In this context, it should be borne in mind that although this kind of institutionalisation primarily aims at dispute avoidance, the need for ancillary classic - albeit flexible - dispute settlement mechanisms is still present, see Handl, *op.cit.* n.157, pp.329-30; R.E.Stein, 'The Settlement of Environmental Disputes: Towards a System of Flexible Dispute Settlement', 12 *Syr.J. Int'l L. & Com.*, 1985, pp.283-98; Wolfrum, *op.cit.* n.45, p.100.; P.Sands, *Principles of International Environmental Law*, Vol.I, pp.163 *et seq.*; and Agenda 21, para.39.9.

¹⁸⁴ See, among others, Gehring, *op.cit.* n.1, especially at p.56.

¹⁸⁵ See T.Marauhn, 'Towards a Procedural Law of Compliance Control in International Environmental Relations', 56(3) *Z.A.O.R.V.*, 1996, pp.696-731.

and disclosure of information, as well as for the placement of independent experts in the Committee, on the model of human rights, the ILO, and nuclear weapons regimes.¹⁸⁶ In fact, these seem to be the major weaknesses in the initial design of the non-compliance procedure that should not be repeated in any future relevant development. In addition, the Implementation Committee has not yet addressed the industrialised countries' obligations to provide funds, which, if continued, might undermine its reputation as an unbiased objective *forum*.¹⁸⁷

Finally, it is worth noting that the Montreal Protocol model for compliance control has been duplicated in the case of the Implementation Committee set up under Article 7 of the 1994 Sulphur Protocol to the 1979 Geneva Convention,¹⁸⁸ while relevant preparatory work under the Basel,¹⁸⁹ and the Climate Change Conventions is currently in slow progress.¹⁹⁰ Be that as it may, in other areas of international regulation, especially in relation to marine pollution, it does not appear that states are willing to submit themselves to formalised compliance control while they take on more demanding obligations.¹⁹¹ As has been already made apparent, the scope for a similar evolution in the Barcelona regime, however desirable, does not seem to exist at present, especially in view of the fact that the chance of developing a meaningful 'non-compliance procedure' was allowed to be missed at the recent revision.

5.4. The European Union Model of Compliance Control.

The Community paradigm of law-making, follow-up, and enforcement is relatively more developed than any other international legal system, to the point that it has been referred to as "the

¹⁸⁶ See, e.g., Barratt-Brown, *op.cit.* n.162, pp.519-70, especially at pp.547-69. However, the effectiveness of the Montreal 'non-compliance procedure' might be attributed exactly to the fact "that the Parties know that the Committee is in the hands of fellow Parties (rather than independent experts), see Victor, *op.cit.* n.173, p.69, and 78-9 with regard to enhanced NGO participation.

¹⁸⁷ See Victor, *op.cit.* n.173, p.68.

¹⁸⁸ See 'Compliance and Sulphur Protocol', 24(2/3) *Env'l Pol. & L.*, 1994, pp.132-3. The mandate of the Committee is to review the implementation of the Protocol and compliance by the Parties with their obligations, through reporting to the Executive Body (Meeting of the Parties) and making appropriate recommendations (Art.7(1)). The Parties, though, still retain the ultimate authority to adopt or reject such recommendations, and on decide on any relevant action, including measures to assist a Party in complying (Art.7(2)). It is also envisaged that this model could be expanded to cover all the Geneva Convention Protocols, see P.Széll, 'Compliance Regimes for Multilateral Environmental Agreements - A Progress Report', 27(4) *Env'l Pol. & L.*, 1997, p.304.

¹⁸⁹ Under Decision III/11, see UNEP, Third Meeting of the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, UNEP/CHW.3/35, 28 November 1995; and K.Kummer, 'The Basel Convention: Ten Years On', 7(3) *R.E.C.I.E.L.*, 1998, pp.232-3.

¹⁹⁰ See Werksman, J., 'Compliance and the Kyoto Protocol: Building a Backbone into a "Flexible" Regime', 9 *Y.B.I.E.L.*, 1998, pp.48-101; S.Oberthür, 'UNFCCC - The Second Conference of the Parties', 26(5) *Env'l L. & Pol.*, 1996, p.200; and Széll, *op.cit.* n.188, pp.305-6. The 2000 Meeting of the Parties is actually going to discuss a complex text on a compliance procedure, see UNFCCC, Report of the Subsidiary Body for Implementation on its Twelfth Session, FCCC/SBI/2000/5, 18 July 2000, Annex III.

¹⁹¹ See Victor, *op.cit.* n.173, pp.75-6. It is characteristic that in the 1996 of the London Convention, consensus could not be reached on the contents and specific objectives of such a procedure and the issue was delegated to future negotiations to be held within two years of the Protocol entering into force, see R.Coenen, 'Dumping of Wastes at Sea: Adoption of the 1996 Protocol to the London Convention 1972', 6(1) *R.E.C.I.E.L.*, 1997, p.58.

only reasonably comprehensive and effective international (albeit regional) model".¹⁹² However, it can not be replicated in other international environmental regimes, not because it is fundamentally *sui generis*,¹⁹³ but because it is a product of an entire integration process that has been going on for many decades now and which has resulted in a regional legal order - and web of interests - covering a very extensive range of subjects, apart from environmental protection.

That said, some elements can be constructively duplicated, and certainly some lessons can be learned. These mostly relate to the specificity and detailed technical character of Community legislation;¹⁹⁴ to its 'direct effect' in Member States' legal orders and the related citizen rights and participation in the enforcement procedure at both Community and national levels;¹⁹⁵ to financial assistance directed to specific environmental actions;¹⁹⁶ and to the existence of a relatively independent organ, the Commission, with extensive follow-up and enforcement powers, combined with a most effective tool of pressure, namely the management of huge funds. These powers are - importantly - exercised in a series of formal and informal stages, and may culminate to adjudication by a highly respected tribunal, the European Court of Justice.

The following Sections examine the two basic techniques of monitoring and reporting as employed in the Community legal order in relation to marine pollution regulation, and the actual compliance-control and enforcement procedures administered by the Commission and the European Court of Justice.

5.4.1. Monitoring under Community Marine Pollution Legislation.

An obligation to monitor the protected environmental medium or the controlled emissions and furnish relevant data to the Commission is encountered in most environmental Directives. This type of information, as already noted, is valuable for assessing the actual progress of each Member State in implementing its duties under respective instruments, and provides a much more reliable indicator than simple notification of formal transposition thereof;¹⁹⁷ for example, a 1988 sampling of beaches in France, Greece, Italy and Spain, who had all transposed the bathing waters Directive into national law, showed that 25% had pathogens exceeding safe levels.¹⁹⁸

¹⁹² P.Sands, 'European Community Environmental Law: The Evolution of a Regional Regime of International Environmental Protection', 100(8) *Yale L. J.*, 1991, p.2518.

¹⁹³ On this point, see *ibid*, pp.2518-20.

¹⁹⁴ See *supra*, Chapter 2, pp.67-74.

¹⁹⁵ See *infra*, Chapter 7, pp.322-25.

¹⁹⁶ See *infra*, Chapter 6, p.251 *et seq.*

¹⁹⁷ On the utility of extending monitoring obligations to all environmental Directives in order to facilitate the Commission's task of controlling correct implementation thereof, see R.Wägenbaur, 'The European Community Policy on Implementation of Environmental Directives', 14 *Ford.I.L.J.*, 1990/91, pp.474-5.

¹⁹⁸ See World Bank/EIB, *The Environmental Program for the Mediterranean - Preserving a Shared Heritage and Managing a Common Resource*, 1990, p.2. And note that by 1991, the quality of bathing waters still presented the major area of problematic application of Community environmental law in the water sector, see EC Commission, Eighth (continued...)

An instance of an instrument that is applicable in the present context and lays down concrete monitoring obligations is Directive 79/923 on the quality of shellfish waters, which calls for the monitoring of designated waters, and specifies very precise conditions and methods that have to be respected, such as frequency, location of sampling points, and percentage of samples conforming to various parameters in order to establish compliance with Community standards (Arts.6 and 7). The same pattern is followed in Directive 76/160 concerning the quality of bathing waters.

In the same vein, Directive 76/464 concerning dangerous substances in water creates an obligation to monitor the emission of discharges of such substances and draw up relevant inventories. Its 'daughter' Directives lay down much more concrete monitoring duties: Hence, Directives 82/176 and 84/156 relating to mercury discharges establish monitoring procedures (Annex I), and reference methods to measure the presence of mercury in water (Annex III), but they also allow for other methods to be used if their limits of detection, precision and accuracy are at least as good as those of the prescribed ones (Arts.3(4) and 3(5) respectively). Monitoring is the responsibility of each Member State, but where mercury discharges affect the water of several States, the latter have to co-operate with a view at harmonising monitoring procedures (Arts.4 and 5 respectively). Similar provisions are found in Directive 83/513 on cadmium discharges,¹⁹⁹ Directive 84/491 on HCH discharges,²⁰⁰ Directive 86/280 on certain other dangerous substances and amendments thereof, and Directive 82/883 on procedures for the surveillance and monitoring of environments concerned by waste from the titanium dioxide industry.²⁰¹ Similarly, Directive 80/68 on the protection of groundwater stipulates that the competent national authorities must monitor compliance with the permits granted to discharge certain noxious substances and the effects of discharges on groundwater (Art.13).

Finally, Directive 91/271 on urban waste water treatment instructs competent national authorities to monitor discharges from urban waste water treatment plants in order to verify compliance with Community requirements, in accordance with specified - or equivalent - control procedures (Art.15(1) and Annex I D), as well as the amounts and composition of sludges disposed of to surface waters. Moreover, the waters themselves that are subject to discharges from urban waste water plants and direct industrial emissions have to be monitored, but only "where it can be expected that the receiving environment will be significantly affected" (Art.15(2)). In the case of

¹⁹⁸(...continued)

Annual Report to the European Parliament on Commission monitoring of the application of Community law, COM(91) 321 final; 1991 O.J. (C 338) 1, at p.43.

¹⁹⁹ The monitoring procedures are laid down in Annexes I and IV; the reference method in Annex III; and the individual and joint monitoring duties in Art.4; while other methods of measurement are allowed under Art.3(5).

²⁰⁰ Annex I, Annexes III and IV, Art.4, and Art.3(5) respectively.

²⁰¹ See also Article 10 of Directive 92/112 on procedures for harmonising the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry.

discharges in less sensitive areas and in the case of disposal of sludge to surface waters, monitoring and other relevant studies are called for to verify that these activities do not adversely affect the environment (Art.15(3)). All relevant information is made available on request by the Commission (Art.15(4)), which, moreover, may formulate guidelines on monitoring in co-operation with the standing Committee of Article 18 (Art.15(5)).

Of equal importance are provisions relating to monitoring obligations not of the Member states themselves, but rather of the persons undertaking polluting activities. Directive 96/61 on integrated pollution control provides the best example in this connection; pursuant to Article 9(5), the permit under which the covered installations are to operate must contain "suitable release monitoring requirements, specifying measurement methodology and frequency, evaluation procedure and an obligation to supply the competent authority with data required for checking compliance with the permit".

Effective fulfilment of all these requirements is expected to be considerably enhanced after the establishment, under Regulation 1210/90, of the European Environment Information and Observation Network (EIONET) and the European Environment Agency (EEA) which screens, evaluates, validates, and processes existing environmental data and information and transforms this into meaningful and reliable information at a European level both for the Community, the Member States and the public at large.²⁰² It should also be noted that the Agency is open to non-EU countries, and, in this connection the Bureau of MAP is authorised to establish links of co-operation especially between the Blue Plan, MED-POL and SPA/RAC and the Agency.²⁰³ The task of assisting the monitoring of environmental measures through appropriate support for reporting requirements, and advise Member States on their respective monitoring systems has been recently added to the mandate of the Agency,²⁰⁴ which is essential but falls well short of the enforcement powers envisaged by some.²⁰⁵

5.4.2. Reporting to the EC Commission.

As explicitly stated in the final provisions of every single Directive, Member States are under an obligation to communicate to the Commission legislative measures taken in

²⁰² See generally, D.A. Westbrook, 'Environmental Policy in the European Community: Observations on the European Environment Agency', 15 *Harv. Env't L. Rev.*, 1991, pp.257-73; and D. Gorny, 'The European Environment Agency and the Freedom of Environmental Information Directive: Potential Cornerstones of EC Environmental Law', 14(2) *Boston Coll. Int'l and Comp. L. Rev.*, 1991, pp.279-99.

²⁰³ See UNEP, *op.cit.* n.27, p.17. The first product of that co-operation is a short report on the state of the Mediterranean environment, see EEA, *State and Pressures of the Marine and Coastal Mediterranean Environment*, Environmental Issues Series No.5, 1999.

²⁰⁴ See Council Regulation 933/1999, 1999 *O.J.* (L 117) 1, Art.1(2)(ii).

²⁰⁵ The European Parliament envisioned a wider range of tasks for the EEA, on the US Environmental Protection Agency pattern, in particular competences to inspect and monitor enforcement of Community environmental law and to prepare environmental impact assessments for Community-financed projects, see 1990 *O.J.* (C 68) 50; and 1990 *O.J.* (C 96) 112.

implementation thereof ('compliance notes'). The implementation date - usually two years after the adoption of the Directive - is very important; should it pass with no information received, a procedure is initiated, comprising formal and informal communication and pressure, which might eventually end up before the ECJ. But that is only a first and general requirement with regard to submission of information relating to national implementation. In fact, several of the Directives examined in Chapter 2 impose further periodic reporting obligations which relate to national measures and programmes going beyond formal transposition to the broad objectives of each instrument. In addition, Member States have to furnish information on the authorisations granted for certain industrial activities, data gathered through monitoring of specific pollutants and/or activities, as well as on actual implementation of Directives.

More specifically, Directive 79/923 on shellfish waters contains a stipulation requiring submission of information concerning waters designated as supporting shellfish life, as well as any revision of such designation; all national provisions establishing terms in deviation of the uniform Community rules, where this is allowed; and in general, any information necessary for the application of the Directive, but only when the Commission addresses a relevant reasoned request (Art.13). Moreover, Member States have to submit regular detailed reports on designated waters and the basic features thereof, i.e. monitoring data, with the first report due six years following initial designation (Art.14). Similar requirements are laid down in Directive 76/160 on the quality of bathing waters.

Another illustration of extensive reporting requirements is supplied by Directive 76/464 on the control of dangerous substances discharged into the aquatic environment, and its 'daughter' Directives: Pursuant to the framework instrument, Member States must establish a system of prior authorisation for the discharge of list I substances containing emission limit values - or quality standards, under certain conditions - at least as stringent as these specified in the 'daughter' Directives. They must, furthermore, establish pollution reduction programmes for list II substances, with specific deadlines for implementation. All information relevant to implementation of these duties, i.e. including details of authorisations and summaries of the national programmes, as well as the results of monitoring, must be submitted to the Commission, albeit at its own request. The mercury Directives follow suit by requiring information to be submitted on request concerning details of authorisations laying down mercury emission standards, and the results of measurements made by the monitoring authorities and any relevant inventories (Arts.5(1) and 6(1) respectively). The Commission is under a duty to prepare a comparative assessment based on this information and forward it to the Council every five years (Art.5(1) and (2), and Art.6(1) respectively). Analogous provisions are found in Directive 83/513 on cadmium discharges,²⁰⁶ and Directive 84/491 on HCH

²⁰⁶ The reporting duty of Member States is provided for in Art.5(1); and that of the Commission in Arts.5(1) and (2).

discharges.²⁰⁷

Under Article 16 of Directive 80/68 concerning groundwater, the Commission may request, *on a case-by-case basis*, notification of the results of prior investigations needed in order to grant permits for the discharge of noxious substances, of details of the authorisations granted, of the results of monitoring and inspection operations carried out, and of the authorisation inventory compiled by the competent authorities.

Directive 78/176 on waste from the titanium dioxide industry requires Member States to send to the Commission programmes for the progressive reduction and eventual elimination of pollution, to be used by the latter in order to submit harmonisation proposals both as regards pollution reduction and the conditions of competition (Art.9).²⁰⁸ There is also a duty to supply information on authorisations, results of monitoring and any remedial action taken. Finally, Member States must submit a report on the progressive reduction of pollution, every three years, on the basis of which the Commission must in turn report to the Council and the Parliament.²⁰⁹

Turning now to the waste sector, under Directive 84/631 on transfrontier shipment of hazardous waste, Member States have to forward to the Commission the particulars of their authorities responsible to supervise such movements and of the installations with a permit to dispose of waste and any modifications thereof (Art.12(1)). In addition, they have to draw up biannual reports on the implementation of the instrument and on the overall situation with regard to transfrontier shipments concerning their respective territories, which will include information on such shipments arising from major accidents, any significant irregularities in shipments that has involved or may involve serious hazards for man or the environment, the quantity and type of waste which has entered their territory for disposal, and the quality and type of waste produced in their territory and subsequently exported (Art.13). The Commission is due to submit regular reports on the basis of these data (Art.14).

It is worth observing at this point that the water Directives do not provide for 'situation reports' as do the waste Directives.²¹⁰ These involve periodic reporting by Member States on the actual conditions prevalent during the period covered with regard to the management and disposal of wastes; in other words 'situation reports' constitute - at least potentially - accounts of actual implementation of Community rules on waste management but also of the wider objectives of the relevant Community policy in each country, on the basis of which the Commission is enabled to

²⁰⁷ Art.5(1), and 5(1) and (2) respectively.

²⁰⁸ See Council Directives 89/428 and 92/112 on procedures for harmonising the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry.

²⁰⁹ Not surprisingly, the picture is somewhat different, when it comes to earlier instruments. In fact, the latest the Directive has been adopted, the most it is likely to contain extensive reporting requirements. Thus, from the Directives relating to the biodegradability of detergents, only the latest, i.e. Directive 86/94, goes beyond requiring communication of merely the text of relevant laws, and demands notification of "any measures" Member States take in implementation of its provisions (Art.1).

²¹⁰ See e.g. Directive 75/439 on the disposal of waste oils, Art.16.

prepare more meaningful assessments. Having said that, in this context as well the common pattern of late and incomplete information inhibits positive follow-up by the Commission.²¹¹

A notable exception to this rule is Directive 91/271 on urban waste water which, indeed, makes such reports mandatory (Art.16). Situation reports on the disposal of urban waste water and sludge have to be drawn up every two years by relevant national authorities, and, importantly, have to be published, i.e. made available to the public, as well as sent to the Commission.²¹² In addition, Member States have ordinary reporting duties, i.e. to provide information on the comprehensive programmes for the implementation of the Directive by 30 June 1994 and any relevant updates every two years after that date (Art.17(1)-(3)); whereas the Commission must compile and publish a biannual review and assessment report (Art.17(5)). The record of Member States in respect of all the above additional reporting requirements is rather poor, as only a minority - which does not include Mediterranean countries - has systematically transmitted relevant information.²¹³

Furthermore, the Commission, as has been already noted, is under a duty to draw up consolidated reports on the implementation of certain Community Directives and submit them to the European Parliament and/or Council. In this task it has been faced with considerable difficulties.²¹⁴ For example, in a 1995 Report on the application of Directive 79/923 on shellfish waters, it is stated that Member States did not respond adequately to a 1989 request for information, which made little comparable data available;²¹⁵ in fact, reports were incomplete for all Mediterranean countries, except Italy which had not even designated such waters by 1995.²¹⁶

These difficulties have been exacerbated by the fact that individual Directives featured stipulations that varied considerably as to both the frequency and content of mandatory reports. In order to harmonise and make more complete and comparable on a sectoral basis the data furnished, the Commission submitted a proposal for a Council Directive standardising and rationalising reports on the implementation of certain environmental Directives, which eventually became Directive 91/692. The purpose of this harmonisation was to help resolve the afore-said problems, and thus enable the Commission and the Member States to assess the progress made in implementing these Directives throughout the Community, and, at the same time, provide the general public with a source of information on the subject (Third Recital). Most significantly, the Commission has

²¹¹ See, for instance, the 1989 Commission report on the application of four waste Directives, which was based on very limited information, DOC. SEC(89) 1455 final, 27 September 1989. The situation has recently improved to a certain extent, see EC Commission Communication, COM(97) 23 final, 27.02.1997.

²¹² Cf. earlier Directives which allow for the non-disclosure of national data with regard to certain substances.

²¹³ See EC Commission, *op.cit.* n.198, p.208.

²¹⁴ See EC Commission, Commission Proposal for a Directive on standardization of reports, COM(90) 287 final, 26 July 1990, p.2, whereby the Commission draws in some cases its reports on the implementation of specific Directives on the basis of information from only a few States, whilst in other cases, it cannot establish a report at all. See also L.Krämer, *E.C. Environmental Law*, 4th ed., 2000, p.283.

²¹⁵ See EC Commission, *Quality of Fresh Water for Fish and of Shellfish Water - Summary Report on the State of Application of the Directives 78/659/EEC and 79/923/EEC*, 1995, p.44.

²¹⁶ *Ibid.*, pp.52, 54, 56 and 59.

expressed the hope that it will thus be able to proceed with its supervisory duties from information supplied from official sources instead of relying on complaints from individuals and questions from Members of the European Parliament.²¹⁷ Accordingly, under Directive 91/692,²¹⁸ relevant individual provisions are replaced by an across-the-board stipulation calling for the submission of information to the Commission in the form of a sectoral report, i.e. covering all pertinent Directives, once every three years (Art.2(1)). The report for the water sector is to be drawn up on the basis of a questionnaire or outline drafted by the Commission, and must be sent in within nine months of the end of the three-year period covered by it (Art.2(1)). The first report is due to cover the period from 1993 to 1995. Subsequently, the Commission is mandated to follow up with an overall report on the implementation of the water Directives, within nine months from receiving the reports from the Member States. However, the first report has been delayed for several years, simply because Member States were too slow to produce theirs.²¹⁹

The only exception to this pattern is provided for Directive 76/160 concerning the quality of bathing water, for which a tighter data-gathering procedure was chosen on the grounds that the public needed to be informed of the quality of bathing water in the Community for the most recent period (Art.3 and Sixth Recital). Accordingly, the Member States are requested to send their relevant reports annually, starting from the end of 1993, and the Commission to publish its consolidated report four months after receiving the former.

It should be noted in this connection that Directive 96/61 instructs states to send, every three years, to the Commission available representative data on the limit values laid down for specific categories of controlled activities, and the best available techniques from which these values are derived (Art.16(1)), and requires the Commission to establish reporting requirements on the overall implementation of the Directive in accordance with procedures laid down in Directive 91/692 (Art.16(3)).

The Commission assisted by a committee composed by representatives of the Member States (Art.6) has indeed drawn up detailed questionnaires or outlines for the principal water Directives to be used by Member States as reporting formats. Commission Decision 92/446 lays down questionnaires with regard to Directive 76/464 on pollution caused by certain dangerous substances discharged into the aquatic environment and several of the 'daughter' Directives regulating discharges from various industrial sectors; Directive 78/176 on waste from the titanium dioxide industry; Directive 79/923 on the quality required for shellfish waters; Directive 76/160 on

²¹⁷ See EC Commission, Eleventh Annual Report on monitoring the application of Community law, COM(94) 500 final, 1994, p.70.

²¹⁸ Note that the EP endorsed the proposal for this Directive with no amendment, see relevant Opinion, 1991 *O.J.* (C 19) 587.

²¹⁹ See EC Commission, First Annual Survey on the implementation and enforcement of Community environmental law, October 1996 to December 1997, SEC 1999/592, 27.4.1999, p.12.

the quality of bathing water; and Directive 80/68 concerning the protection of groundwater.²²⁰ Moreover, formats for the presentation of national programmes on urban waste water treatment under Directive 91/271 are contained in Commission Decision 93/481.

Thus, national reporting obligations are now underscored by two complementary and legally binding texts, i.e. the relevant Article of each specific Directive and the said Decisions, the latter being addressed to Member States. That should not be taken to mean that these Decisions impose additional requirements; in fact, they are merely technical, and as precise as the reporting provisions of the respective Directives themselves allow them to be. That said, the task of filling in the questionnaires appears to be very demanding, as they require specific figures and details of implementing measures and not just general statements or description of future plans that would incidentally cover the control that Community instruments seek to impose. The issue of how effective they will prove in addressing some of the malfunctions of the reporting system, as intended, is one to be assessed in the future; for the time being they do not seem to have had a great impact in the quality or timeliness of information transmitted.²²¹

Lastly, a significant weakness of the Community reporting system must not escape attention: Member States are under no obligation to provide information on the national measures giving effect to international environmental agreements, even those to which the Community is a party. There does not seem to be any substantive legal obstacle to the establishment of such a duty, which could potentially contribute to a much more effective discharge of the reporting obligations under international environmental agreements, by means of consolidated reports on behalf of all Member States parties to a specific international instrument, drawn up by the Commission.

5.4.3. The Non-Compliance Mechanism of the European Union.

One of the very essential tasks of the Commission, with a view to securing the proper functioning and development of the common market, consists in ensuring the application of primary and secondary legislation (Article 211). Although in some areas the Commission has direct or indirect inspection rights in order to fulfil its mandate,²²² this is not the case in the environmental field, despite some rare 'fact-finding missions' that actually take place.²²³

²²⁰ For the sake of completeness, reference should be made to the rest of the water Directives for which questionnaires are laid down in this Decision, namely Directives 78/659 on the quality of fresh waters supporting fish life; 75/440 and 79/869 on the quality of surface water intended for the abstraction of drinking water; and 80/778 on the quality of water intended for human consumption.

²²¹ See Krämer, *op.cit.* n.214.

²²² For example, Commission Regulation 17/62, gives powers of direct inspection of private firms in the field of competition; and Commission Regulation 2241/87, allows for inspection of the national inspection systems relating to the fishing sector.

²²³ See L. Krämer, 'The Implementation of Environmental Laws by the European Economic Communities', 34 *German Y.B.I.L.*, 1991, p.37; and M. Hession, 'The Role of the EC in Implementation of International Environmental Law', 2(4) *R.E.C.I.E.L.*, 1993, pp.345-6, arguing that lack of direct enforcement powers of the Commission undermines the (continued...)

Ensuring the application of Community legislation in Member States is indeed a very demanding job involving confirmation that the Directives are both timely and correctly implemented in each Member State.²²⁴ In its endeavour to perform this duty, the Commission uses an array of formal and informal - though confidential and very little publicised -²²⁵ procedures, starting from letters to the Member States merely to remind them of the time limit laid down in an instrument, if close to expiry, and their transposition obligation, or periodic meetings with national authorities ('package' or '*ad hoc* meetings', introduced in 1990) to discuss the factual or legal aspects of all relevant problems,²²⁶ to actions before the European Court of Justice.²²⁷

It must be reminded once more in this connection that although the Community is ultimately responsible for Member State compliance with environmental obligations laid down in international conventions to which it is a party,²²⁸ the Commission is strangely not informed of national measures taken in implementation of these international conventions, nor does it monitor compliance in any way, except when specific Community implementing legislation has been adopted. This is commonly the case only when international instruments contain trade provisions,²²⁹ unlike the Barcelona Convention and Protocols. Consequently, the chance of a substantial contribution to the effective implementation of the latter, at least by Mediterranean Member States, is missed. This practice has been repeatedly criticised as legally flawed: When entering into an international agreement, the Community as a whole undertakes to apply its provisions; it may well leave to individual Member States the task of adopting implementing legislation, but if they fail to do so or, in general, violate the convention, then the Community as a collective entity is put in a position of having breached the relevant international commitment.²³⁰

²²³(...continued)

effectiveness of EC environmental law. See also Council Resolution of 7 October 1997 on the drafting, implementation and enforcement of Community environmental law, 1997 *O.J.* (C 321) I at para.16, where the idea of a system of inspection at Community level is rejected.

²²⁴ For an explicit admission that the Commission finds it often very difficult to ascertain whether Community legislation has been properly transposed, see Commission of the EC Commission, Tenth Annual Report on the monitoring of the application of Community law, COM(93) 320 final, 1993, p.98.

²²⁵ See L.Krämer, *Focus on European Environmental Law*, 1992, pp.225-7.

²²⁶ In this context, it is important to note the existence - since 1992 - of the 'EC Network for the Implementation and Enforcement of Environmental Law', made up of environmental enforcement authorities, with a view at exchanging information and experience in order to address issues of mutual concern and enhance the quality of enforcement, see *infra*, Chapter 7, p.321.

²²⁷ See Krämer, *op.cit.* n.225, pp.218-228; and *op.cit.* n.223 pp.9-53, for a very detailed description of the process. See also R.Williams, 'The European Commission and the Enforcement of Environmental Law: An Invidious Position', 14 *Y.B. of Eur.L.*, 1994, pp.351-99; J.Scott, *EC Environmental Law*, 1998, pp.149-55; R.Macrory, 'Community Supervision in the Field of the Environment', in H.Somsen (ed.), *Protecting the European Environment - Enforcing EC Environmental Law*, 1996, pp.9-21; and J.H.Jans, *European Environmental Law*, 1995, pp.143-50.

²²⁸ See *supra*, Chapter 2, p.96-8.

²²⁹ See, e.g., Case C-182/89, *Commission v. France*, 1990 *E.C.R.*, p.I-4337, regarding implementation of CITES.

²³⁰ Krämer, *op.cit.* n.223, pp.18 and 44-6; cf. A.Nollkaemper, *The Legal Regime for Transboundary Water Pollution: Between Discretion and Constraint*, 1993, p.278, where it is maintained that each issue covered by an international agreement should be examined separately to assess whether it lies within the exclusive competence of Member States or not.

Leaving that issue aside, Ludwig Krämer, former Head of DG XI, has publicly admitted that state reports are rarely a source of information on effective implementation of Community environmental rules.²³¹ Citizens can help in this context by laying written complaints before the Commission concerning any national measures or practices contrary to Community environmental law. The value of citizen complaints is highlighted by the fact that in any given year violations detected by the Commission's own enquiries are only a fraction of those brought to notice through written complaints.²³² In 1997, the procedure under which the complainant had no right after filing his complaint changed, and now, should the Commission decide to file the complaint, the complaint has the right to be heard and present his observations.

When a breach comes in any way to the notice of the Commission, a 'letter of formal notice' of the alleged infringement is dispatched to the State concerned; if the Commission is not satisfied with the reply - or if there is no reply at all -, it delivers a detailed 'reasoned opinion' giving two months notice for compliance. Then, if the situation warrants it, it may initiate an action before the Court, asking for a binding declaratory judgment or even for *interim* measures (Art.243).²³³ However, most cases are settled before this stage with competent national authorities rectifying the situation after repeated pressure and contacts take place.²³⁴

There are three broad, and sometimes overlapping, grounds on which a state may be referred to the ECJ, namely failure to adopt and transmit to the Commission national measures to implement an environmental Directive; national measures not fully and correctly discharging the obligations imposed; and failure to apply national implementing provisions correctly.²³⁵ During this process, the Commission has a large measure of discretion on whether to act, although its performance is scrutinised by the Parliament, especially during discussion of the former's annual report of activities (EC Treaty, Art.200);²³⁶ at the end of the day, the use of this discretion depends

²³¹ Krämer, *op.cit.* n.223, p.30.

²³² Thus, in the water sector, 1990 ended with 140 complaints as compared with 22 cases otherwise detected. With regard to all environmental legislation, during the same year, there were 111 complaints against Spain, while 16 cases were otherwise detected; while the respective figures for France were 47/2, for Greece, 40/4, and for Italy, 33/9, see *ibid.*, pp.31-2; and EC Commission, *op.cit.* n.212, pp.43-4. Involvement of the public and NGOs is one of the most positive features of the Community system, but it does not go all the way to giving standing to sue in front of the ECJ, see *infra*, Chapter 8, pp.352-5.

²³³ See Case 57/89, *Commission v. Germany*, 1989 *E.C.R.*, p.2849, where such measures were requested for an alleged breach related to the environment, but the application was eventually rejected on the grounds that 'urgency' had not been proved; Scott, *op.cit.* n.221, pp.161-5; and L.Krämer, *E.C. Environmental Law*, 4th ed., 2000, p.294, arguing that "it will hardly ever be possible to demonstrate the urgency... since the pre-Court stage, during which no interim measures are possible, takes almost three years".

²³⁴ See EC Commission, *op.cit.* n.212, p.42.

²³⁵ See Krämer, *op.cit.* n.216, p.16 *et seq.*

²³⁶ The EP can also influence the work of the Commission by other means: Article 193 of the EC Treaty allows *ad hoc* Committees of Enquiry to investigate alleged contraventions or maladministration in the implementation of Community law, except when legal proceedings relating to the alleged facts are pending. Another procedure widely used by EP Members is the submission of questions to the Commission and the Council. Although answers are not always detailed or satisfactory, this device provides publicity and draws attention on the issue it involves. It is characteristic that, by 1993, 3000 questions had been put on environmental issues, relating to specific problems or to a failure by Member (continued...)

both on material limitations and on political considerations. The Commission has frequently used its power in relation to environmental matters;²³⁷ the number of infringement proceedings is generally on the rise, and in 1994 alone forty-two letters of formal notice (ninety in 1993) and forty-six reasoned opinions (118 in 1998) were dispatched, whereas three cases were referred to the ECJ (thirty-seven in 1997).²³⁸

All said, the Commission itself has often stressed the fact that when it analyses the way legal measures of environmental protection are put into effect "it has neither the means to investigate the facts of a specific case nor the powers to impose periodic controls on the Member States",²³⁹ which implies that what it actually does falls well short of a sweeping, comprehensive and totally adequate compliance control. That said, in the course of these proceedings, the ECJ has developed a set of consistent principles regarding implementation of Community law in Member States which have far-reaching significance for compliance control and will be discussed in Chapter 8.

If we now examine the record of Mediterranean states in these proceedings, it appears that France does not have serious problems in implementing these pieces of legislation that relate to the protection of the marine environment.²⁴⁰ On the contrary, Italy has a long list of judgments against it,²⁴¹ especially for infringements of water Directives, ²⁴²the most recent relating to deficient implementation of Directive 91/676 on nitrate pollution from agricultural sources, and of Directive

²³⁶(...continued)

States to carry out Community obligations; most of these already filed seem to have come from the Southern countries of the EU, see Lord Slynn of Hadley, 'The European Community and the Environment', 5(2) *J. of Env't L.*, 1993, p.264.

²³⁷ In fact, systematic monitoring of the application of environmental legislation has started as late as 1984. Also note that to date only once has the ECJ dealt with a case brought by a fellow state, namely France against the UK in relation to the mesh size for prawn fisheries in Case 141/78, *France v. United Kingdom*, 1979 *E.C.R.*, p.2923.

²³⁸ See EC Commission, Twelfth Annual Report on monitoring the application of Community law (1994), COM(95)500 final, 7.06.1995, p.59; EC Commission, *op.cit.* n.219, p.38; and EC Commission, Sixteenth Report on monitoring the application of Community law, COM(1999) 301 final, 9.07.1999, p.56.

²³⁹ See EC Commission, *op.cit.* n.224, p.101.

²⁴⁰ The more problematic area of regulation for France is that of air quality, see, e.g. Case C-14/90, *Commission v. France*, 1991 *E.C.R.*, p.I-4331; Case C-13/90, 1991 *E.C.R.*, p.I-4327; and Case C-64/90, 1991 *E.C.R.*, p.I-4335.

²⁴¹ The history of judgments against Italy in relation to environmental Directives starts in 1979, see Case 21-79, *Commission v. Italy*, 1980 *E.C.R.*, p.1; Case 91-79, 1980 *E.C.R.*, p.1099; and Case 92-79, 1980 *E.C.R.*, p.1115.

²⁴² See Joined Cases 30 to 34/81, *Commission v. Italy*, 1981 *E.C.R.*, p.3379, relating to failure to adopt, within the prescribed periods, the provisions needed in order to comply with Directives 75/439 on the disposal of waste oils, 75/440 concerning the quality of drinking water, 75/442 on waste, 76/160 concerning the quality of bathing water, and 76/403 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls. See also Case 429/85, 1988 *E.C.R.*, p.843, relating to non-transposition of Community law on packaging and labelling of dangerous substances in time; Case 322/86, 1988 *E.C.R.*, p.3995, for failure to transpose into national law Council Directive 78/659 on the protection of the quality of fresh waters capable of supporting fish life; Case 309/86, 1988 *E.C.R.*, p.1237, relating to the Directive on methods of testing the biodegradability of surfactants; Case C-360/87, 1991 *E.C.R.*, p.I-791, for failure to transpose the groundwater Directive; Case C-70/89, 1990 *E.C.R.*, p.I-4817, on cadmium discharges; Case C-302/95, Judgment of 12 December 1996, for non-transposition of the urban waste water Directive; and C-225/96, Judgment of 4 December 1997, for non-implementation of the shellfish waters Directive.

76/464 on dangerous substances.²⁴³ Italy also has the 'privilege' to have been condemned for failure - without even giving any reasons for it - to fulfil its reporting obligations, and more specifically to transmit information to the Commission under various waste Directives.²⁴⁴ The Court has found in this connection that breach of reporting obligations involves apart from violation of specific secondary provisions, also an infraction of new Article 10 of the EC Treaty which requires Member States to co-operate with the Commission so that the latter can perform its supervisory functions under Article 211. Besides, Italy is the only Mediterranean state that has a judgment against it for not complying with a ten-year-old decision of the Court relating to used oils.²⁴⁵

From the newer Members, Spain has several times appeared before the Court for infringements of Community law relating to the protection of the marine environment from pollution by dangerous substances under Directive 76/464,²⁴⁶ protection from nitrate pollution under Directive 91/676, and violation of the bathing waters Directive.²⁴⁷ In 1995, Greece was referred to the ECJ for failure to adopt measures to control and reduce list II substances under the said instrument.²⁴⁸ Greece has additionally been found in breach of its obligations for not transposing Directive 91/271 on urban waste water treatment on time.²⁴⁹

In case a State does not comply with a judgment the available formal course of action lies with the Commission: It may issue a 'reasoned opinion' requiring rectification within a specified time limit; if non-compliance continues, it may take further action in front of the Court alleging failure to comply with what is now Article 228. The Maastricht Treaty amended this Article which now allows the Commission to propose and the Court to uphold that a Member State not complying with an ECJ judgment is liable to a specified lump sum or 'penalty payment'.²⁵⁰ It is further submitted that failure by a Member State to pay a fine could result in the freezing of sizeable

²⁴³ Case C-195/97, *Commission v. Italy*, Judgment of 25 February 1999; and C-285/96, Judgment of 1 October 1998, respectively.

²⁴⁴ Case C-33/90, *Commission v. Italy*, 1991 *E.C.R.*, p.I-5987; and Case C-48/89, 1990 *E.C.R.*, p.I-2425.

²⁴⁵ See Case C-366/89, *Commission v. Italy*, 1993 *E.C.R.*, p.I-4201.

²⁴⁶ See Case C-192/90, *Commission v. Spain*, 1991 *E.C.R.*, p.I-5933; Case C-355/90, 1993 *E.C.R.*, p. I-4221; and Case C-214/96, Judgment of 25 November 1998.

²⁴⁷ Case C-71/97, *Commission v. Spain*, Judgment of 1 October 1998, regarding designation of vulnerable zones; and C-274/98, 13 April 2000, regarding failure to establish action programmes under Directive 91/676. On the shellfish waters Directive, see Case C-92/96, Judgment of 12 February 1998.

²⁴⁸ Cases C-232 and 233/95, *Commission v. Greece*, Judgment of 11 June 1998, see 1995 *O.J.* (C 248), pp.3-4; and C-384/97, Judgment of 25 May 2000.

²⁴⁹ See Case C-161/95, *Commission v. Greece*, 1996 *E.C.R.*, p.I-1979. See also a series of other judgments against Greece relating to breach of environmental Directives, in Case C-45/91, 1992 *E.C.R.*, p.I-2509; Case C-170/94, 1995 *E.C.R.*, p.I-1819; Case C-160/95, 1996 *E.C.R.*, p.I-1971; and Case C-329/96, Judgment of 26 June 1997.

²⁵⁰ It should be reminded that natural and legal persons can be subject to fines and other pecuniary obligations if they violate community law; relevant decisions of the Council or the Commission and ECJ judgments are enforceable in Member States under the rules of civil procedure (Arts.187, 192).

payments from the Structural Funds, or of transfers from other sources.²⁵¹

The Commission held extended and intense talks with a view to defining its policy on imposition of fines, complicated by the fact that the matter is fraught with political sensitivity and there are also difficulties in determining the precise amount of these fines.²⁵² Finally, in August 1996 it came up with general criteria which are to be refined, once they have been applied to individual cases by the ECJ.²⁵³ The Commission initially notes that it does not intend to ask for a penalty in every case, when, for instance, the infringement is minor or there is no risk of the offence being repeated. It, moreover, deems that a penalty payment as opposed to a lump sum option would be the most appropriate choice in most cases. As to the amount of penalty, the Commission considers that this should be calculated on the basis of three fundamental criteria, namely the seriousness of the violation, which in turn depends on the importance of the Community rules breached and the effects of the infringement on general and particular interests;²⁵⁴ its duration; and the need to ensure that the penalty itself is a deterrent to further infractions, which suggests that it would be more than symbolic, and would be even higher if there is a risk of repetition.

In accordance with these principles, the Commission submitted its first requests for financial penalties (ranging from ECU 26,000 to ECU 30,000 per day) in early 1997, but four out of the five cases were settled out of court by the end of the year.²⁵⁵ Two new cases have subsequently been referred to the Court, one against Greece concerning the application of the Directive on waste, while, in 1997, fifteen cases reached the 228 Article letter or 'reasoned opinion' stage.²⁵⁶ In fact, Greece found itself in the most embarrassing position of being the first Member State against which a monetary penalty was imposed for failure to comply with a previous ECJ judgment.

The case notably involves long-standing infringements of environmental Directives, i.e. Directives 75/442 and 78/319 on the management of wastes. The Commission has been concerned since 1987 about uncontrolled hazardous waste disposal in a river, 200 metres from the sea, in the area of Chania, Crete. The first judgment ordering Greece to take appropriate measures to rectify

²⁵¹ See D. Wilkinson, "Maastricht and the Environment: The Implications for the EC's Environment Policy of the Treaty on European Union", 4(2) *J. of Env't L.*, 1992, p.233; Krämer, *op.cit.* n.223, pp.24-5.

²⁵² Statement by R.Bjerregaard, Environment Commissioner, reported in Greek newspaper, *To Vima*, 17 November 1996, p.E6.

²⁵³ See EC Commission, Memorandum on applying Article 171 of the EC Treaty, 1996 *O.J.* (C 242) 6; and Method of calculating the penalty payments provided for pursuant to Article 171, 1997 *O.J.* (C 63) 2.

²⁵⁴ In this connection, the Commission gives the example of loss of resources as a result of a breach relative to the protection of the environment from pollution to illustrate grave effects of an infringement to general and particular interests.

²⁵⁵ See EC Commission, *op.cit.* n.219, p.39.

²⁵⁶ *Id.* Seven out of the ten cases in which the Commission applied for financial penalties by the end of 1998 have been settled, see EC Commission, Sixteenth.... *op.cit.* n.238, *ibid.*

the situation was issued in 1992.²⁵⁷ After exhausting all means of pressure to comply, in 1997 the Commission applied for an order requiring Greece to pay EUR 24,600 per day of delay from delivery of the new judgment. The Court indeed found that the alleged infringements were still committed and moreover that their duration and particular seriousness had a considerable impact on private and public interests and made it urgent to get Greece to observe its obligations. It consequently ordered the country to pay EUR 20,000 - calculated on the basis of its appropriateness to the circumstances and its proportionality to the breach and the Member States's ability to pay - for each day of delay in complying with the 1992 judgment from 4 July 2000.²⁵⁸ The news of the substantial daily fine had a big impact on the Greek public's perception of the Community enforcement mechanism which was for the first time seen as one that could make a difference. Most importantly, it created a lot of commotion within the Greek government and administration which is currently taking decisive steps to build the appropriate facilities in the area even in the face of local opposition. It thus seems that an unwilling government can effectively be forced into compliance with Community standards, if all else fails, with the threat of a tangible and painful financial loss. However, this can only be an extraordinary measure, a last resort, that can be brought about only after many - thirteen in this case - years of bad practice and legal breaches.

All said, the merits of this system are only relative, and there are still weaknesses to overcome and considerable problems of non-compliance and enforcement.²⁵⁹ To this effect, proposals have been long put forward for further economic or criminal sanctions against states violating Community rules, and even a Community-wide 'pollution police' or inspectorate.²⁶⁰ More modest, but potentially more effective could be the intense use of economic instruments supplementing legislation, as well as measures such as 'green' taxes, eco-labelling and environmental auditing;²⁶¹ and the mobilisation of the European public opinion.

In relation to the last point, it seems that Mediterranean NGOs, encouraged by the more advanced legal framework of the EU, have emerged as more active participants during recent years. Their latest targets include the actual involvement of the Fifth Community Action Programme for the Environment with the setting up of a "Mediterranean Water and Natural Resources Management Community", patterned on the ECSC, to promote common policies on resource management, water pricing, infrastructure, technology transfers and research and development, along with environmental education and training and cultivation of public awareness; a Regional

²⁵⁷ Case C-45/91, 1992 *E.C.R.*, p.1-2509.

²⁵⁸ Case C-387/97, *Commission v. Greece*, Judgment of 4 July 2000.

²⁵⁹ See EC Commission, *op.cit.* n.217; European Environment Bureau, *Report of the Seminar on the Implementation and Enforcement of EC Environmental Legislation*, London, 27-28 Oct.1986; L.Krämer, 'Rules and Enforcement', *Environment Strategy Europe* 1991, p.48.

²⁶⁰ See T.R.Crockett & C.B.Schultz, 'The Integration of Environmental Policy and the European Community: Recent Problems of Implementation and Enforcement', 29 *Colo.J. of Trans'l L.*, 1991, p.169; and Krämer, *op.cit.* n.223, pp.52-3.

²⁶¹ See Wägenbaur, *op.cit.* n.197, pp.455-77.

Environmental Court of Justice with authority to order the implementation of international treaties, impose clean-up costs, and grant standing to NGOs and citizens; and a Special Environmental Protection Fund to mitigate environmental damage caused by mass tourism in the region etc.²⁶² The most likely course of action, however, that the Commission plans to take and which is in fact the most promising is to shift attention to strengthening procedural rights within individual Member States in order to decentralise the whole enforcement process.²⁶³

5.5. Concluding Remarks.

To sum up the preceding discussion, let us start by noting that the comprehensive institutional approach to compliance with international environmental law is today well-established. This model relies on flexible, informal interactions within treaty institutions to scrutinise and promote compliance with substantive standards. However, because of its heavily political character, there is a conspicuous need for openness and transparency, as well as involvement of non-traditional actors, such as the public interested in the protection of the environment, to make it more accountable and effective.

Monitoring and reporting are the main information-gathering techniques in this context. Under the Barcelona Convention and MAP in general, the Parties have extended monitoring obligations, but in practice a Mediterranean basin-wide monitoring network producing data on a regular basis does not exist, nor states transmit monitoring information under the Land-based Sources Protocol to the extent they should. In the same vein, one can safely conclude that reporting under the Barcelona Convention and Protocols does not fulfil its proper role. Even in the rare instances when it actually takes place, it is not being put in any constructive use, nor is it available to the public, or used to increase transparency and collective pressure towards increased compliance in any way. Similarly, very extensive reporting requirements under MARPOL are accompanied by poor and incomplete response by its parties. The analytical work undertaken by AIDEnvironment, in this context, is a good illustration of how effective NGO involvement in the follow-up process can be.

In general, examination of the reporting mechanisms of the main international treaty regimes applicable to marine pollution of the Mediterranean Sea points to a common pattern: Notwithstanding extensive reporting requirements and efforts within various organs to facilitate and promote submission of reports, states prove disinclined to provide the required information; even when they do so, both quality and adequacy of reports submitted are sub-standard. At the same time, the organs responsible to put data gathered into effective use remain in most cases inactive.

²⁶² See Crockett & Shultz, *op.cit.* n.260, p.169.

²⁶³ See *infra*, Chapter 8, pp.354-5.

More generally, in the Mediterranean context the Parties to the Barcelona Convention are not concerned with compliance control, despite Secretariat efforts. Notwithstanding positive indications to a future development of some more streamlined procedures in the context of MED POL, to date they have shown no willingness to endow their collective organ with anything more than a traditional 'soft' and informal supervisory function, which has not amounted - nor is likely to amount in the future - to much in terms of real impact and actual follow-up practice.

IMO, on the other hand, makes an impressive effort at identifying the problem areas affecting implementation of international standards and recommending appropriate correcting actions. However, it stops well short of an actual compliance-control mechanism that would pinpoint concrete breaches of international undertakings and proceed to a well-defined course of action to address these phenomena. Much more effective in this respect is the model of co-operative supervision by national port authorities.

The Paris MOU establishes a supervisory mechanism, outside the MARPOL regime, allowing national authorities to exchange information and eventually form an effective control network difficult to bypass. Although the Paris MOU model can only be applied in the area of shipping activities, conclusion of a similar agreement covering the Southern and Eastern Mediterranean can potentially make a difference in the effort to banish sub-standard shipping from the region.

Strengthening typical compliance control functions within the comprehensive institutional model can be achieved by introducing much more formal 'non-compliance procedures', such as the one under the Montreal Protocol. This permanent, streamlined mechanism explicitly provides for sanctioning or assistance measures to address non-compliant behaviour, and seems to produce tangible results, although there is always room for further improvement. In fact, this model has much scope of expansion to other international environmental regimes; unfortunately the Mediterranean one is not a likely candidate as yet, in view of the attitude of states towards the issue, as well as the fact that the chance of developing a meaningful non-compliance procedure was missed at the recent revision. The Montreal Protocol teaches another very significant lesson, namely that the acceptance and legitimisation of stringent compliance control is closely linked with a treaty funding mechanism that would make resources available to the extent the parties meet their substantial and procedural obligations. This point will be further pursued in the next Chapter.

Lastly, it is in the context of the European Union that one can find the most advanced and wholesome compliance-control mechanism, involving both political and informal, and judicial stages. Involvement of the public and NGOs is one of the most positive features of the Community system, and is certainly worth considering in the Barcelona context as well; so is the collaborative process of interaction with national authorities called to implement environmental legislation, before the Commission resorts to the more adversarial enforcement procedures. Nonetheless, the

Commission's work is restrained by all kinds of political, practical and other limitations - one of which is that it does not exercise any control over compliance with international conventions to which the Community is a Party, such as the Barcelona Convention and Protocols - and ECJ judgments cannot be effectively and rapidly enforced as yet. In the same vein, monitoring and reporting on Community environmental law, despite their much more sophisticated and compulsory character, are still dysfunctional, and certainly the relevant record of Mediterranean countries is poor. All said, the reaction to the very recent imposition of a fine to Greece highlights the importance of imposing monetary, or generally financial, loss as a consequence of a legal breach, and conversely of providing such incentives for compliance with international environmental standards. This is the subject of the next Chapter.

Chapter 6.

***FINANCIAL AND TECHNICAL INCENTIVES AND ASSISTANCE TO
COMPLY WITH INTERNATIONAL ENVIRONMENTAL
OBLIGATIONS IN THE MEDITERRANEAN.***

A significant issue that has been raised several times in previous Chapters is that of availability of resources devoted directly to the implementation of legal undertakings and/or to the development of requisite national infrastructure and capacity, and of relevant mechanisms to assist Mediterranean states in their effort to fulfill their international obligations regarding protection of the marine environment from pollution. This Chapter is going to examine this subject in greater depth. But, first, it is worth considering whether all the concern about huge costs that have to be met, if international environmental regulations are to be fulfilled, is overestimated; in other words, let us briefly explore what could be called 'the myth of excessively costly measures'.

There is, indeed, much discussion regarding the cost that reduction of, chiefly, land-based pollution implies,¹ and a presumption that it is actually very high to the extent it involves most of the economic and social activity taking place not only in coastal areas but in the whole of the watershed.² That is often used as an excuse, mostly by developing states, for non-compliance with relevant environmental obligations. What seems to lie behind this defence, however, is an unwillingness to formulate policy priorities in an environmentally sustainable manner; should political will be present, then the cost-effectiveness of required measures is rather easier to substantiate.

In that vein, UNEP has realised that the costing of programmes designed to abate land-based pollution and the assessment of benefits therefrom is a crucial step in environmental management and sustainable development of coastal areas, and can contribute towards persuading governments that measures are feasible and worthwhile. Hence, it is currently attempting to measure these costs and benefits and has come up with general methodological guidelines to improve

¹ See, among others, J.Ashworth, I.Papps & D.J.Storey, 'Assessing the Effectiveness and Economic Efficiency of an EEC Pollution Control Directive: The Control of Discharges of Mercury to the Aquatic Environment', in J.-M. Graf von der Sculenburg & G.Skogh (eds.), *Law and Economics and the Economics of Legal Regulation*, 1986, pp.207-25; on specific costs concerning the Mediterranean region, see *infra*, fn.4.

² On this point, see *supra*, Chapter 1, pp.37-47.

relevant estimates at the national level.³

In the context of Mediterranean marine pollution, for example, where most of UNEP's earliest work on this theme has been done, the initial estimate for dealing with land-based pollution only - calculated in 1991 - came up with a figure between \$25-100 billion for the next twenty years, i.e. between \$1-5 billion *per annum*, while the total cost of halting degradation of the marine environment from all sources would be two to three times higher.⁴ But, as the Executive Director of UNEP stressed, "these figures are not as shocking as they may sound at first instance", in view of the fact that annual income from tourism alone was at the time the above estimate was made around \$3 billion in Yugoslavia and \$10 billion in France,⁵ which could be well lost if the environment degraded further.

Indeed, case studies on two areas, the Bay of Izmir in Turkey and the island of Rhodes in Greece, present some very interesting findings.⁶ The two sites represent two different, yet typical and complementary, situations, common throughout the Mediterranean: one a large coastal urban and industrial centre, the other an island with tourism as the main economic activity. It was estimated that in both cases the economic and social benefits from pollution control and abatement investments exceeded the costs by a factor of one under the most conservative scenario to a factor of eight under the most progressive one.

Nonetheless - and whatever the findings of relevant studies may be -, there are always instances where the countries concerned cannot readily come up with the funds needed for environmental investments even when the long-term economic benefits are acknowledged, or - more frequently - they do not make the required policy choice, i.e. they rather channel the available financial resources to other sectors that are viewed as more vital to the country's development. Then, international financial and technical assistance with environmental conditions attached becomes both relevant and indispensable.⁷

This type of assistance can prove effective in more than one ways: It can act as a direct or

³ See UNEP, Meeting of Government Designated Experts to formulate a Draft Strategy for the reduction of the degradation of the marine environment from land-based sources of pollution and activities in coastal areas, Strategy for the Reduction of the Degradation of the Marine Environment from Land-Based Sources of Pollution and Activities in Coastal Areas (including an Annex on preliminary estimate on the costs associated with the protection of the Mediterranean Sea against pollution from land-based sources and activities in coastal areas), UNEP(OCA)/WG.14/3 1991.

⁴ See UNEP, Report of the Seventh Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and related Protocols, UNEP(OCA)/MED IG.2/4, 11 October 1991, Annex III, p.5.

⁵ *Id.*

⁶ See UNEP, Costs and Benefits of Measures for the Reduction of Degradation of the Environment from Land-Based Sources of Pollution in Coastal Areas - A. Case Study of the Bay of Izmir - B. Case Study of the Island of Rhodes, *MAP Technical Reports and Studies* No.72, 1993.

⁷ Professor Wolfrum considers balancing environmental commitments with potential economic benefits and provision of compliance assistance two very effective mechanisms to promote compliance in such cases, see R. Wolfrum, 'Means of Ensuring Compliance with and Enforcement of International Environmental Law', 272 *Receuil des Cours*, 1998, pp.110-37.

indirect incentive to comply with the said obligations. In other words, the countries concerned not only turn to these sources of funding when they find it difficult to execute environmental projects, but also, reversely, undertake environmental investments so as to be able to benefit from available international funds. By the same token, it could even, if incorporated into the treaty regime, induce parties to accept some form of meaningful compliance control, as observed in the Montreal Protocol framework.⁸

In Chapter 3 we traced the gradual acknowledgment of the principle of 'common but differentiated responsibility' and of the centrality of financial mechanisms in international environmental law.⁹ Although this process culminated at UNCED (Rio Declaration, Principle 7, Agenda 21, Chapter 33), already at the LOS Conference the importance and necessity of international assistance for the protection of the marine environment, especially for developing countries, was appreciated. Hence, the LOSC provides that the latter be given special preference when calling on the specialised services of international organisations or requesting technical assistance (Art.203).¹⁰ This aims at improving 'the means at their disposal' and enhance their capabilities to effectively administer their environmental obligations. In the same vein, Article 202 commits all states to "promote programmes of scientific, educational, technical and other assistance to developing states for the protection and preservation of the marine environment"; "provide appropriate assistance... for the minimisation of the effects of major incidents which may cause serious pollution"; and for the preparation of environmental impact assessments.

Moreover, in Part XIV, the general undertaking to promote the development and transfer of marine technology on fair and reasonable terms focuses on developing states in need of technical assistance with regard, among others, to the protection of the marine environment (Art.266). Special reference is made to the establishment and continuous strengthening of national and regional marine scientific and technological centres in developing states in order to enhance domestic capabilities to preserve and protect their environment and resources (Arts.275-277). In the organisation of the whole endeavour, centre stage is given to international institutions, such as those of MAP which are examined below.

It is, therefore, essential to examine the various mechanisms of financial and technical assistance that are currently operating at the international level to assist Mediterranean states in the task of fulfilling their duties of marine environmental protection. The following sections will look into the four main mechanisms applicable in the case of the Mediterranean Sea, namely funding and assistance in the framework of MAP; financial assistance for environmental protection in the

⁸ See *supra*, Chapter 5, pp.219-20.

⁹ See *supra*, Chapter 3, pp.118-20; and p.135-6, for these concerns as addressed in Agenda MED 21.

¹⁰ What in human rights terms could be called 'solidarity rights', see A.Boyle, 'The Role of Human Rights in the protection of the Environment', in A.E.Boyle & M.R.Anderson (eds.), *Human Rights Approaches to Environmental Protection*, 1996, pp.48 and 57-9.

European Community framework; assistance under the World Bank/EIB Environmental Program for the Mediterranean; and GEF funding directed towards protection of the oceans. Discussion will be limited to these issues that relate closely to control over compliance with treaty norms as has been defined so far; therefore, it will not address questions of economic incentives, such as state aids and taxes, as these are still mainly national policy choices, nor of bilateral environmental lending, or even of intellectual property in relation to transfer of technology, however topical these may be.¹¹ Besides, the immense field of international co-operation in scientific research is left out of the scope of the present Chapter, despite its significant impact in capacity-building.

6.1. Funding and Assistance in the Framework of the Mediterranean Action Plan.

6.1.1. The Mediterranean Trust Fund.

In its initial stages, the MAP system was faced with great institutional and financial constraints: Limited funds were available from UNEP and use was made of existing international organisations and co-ordinating bodies (MAP, IV). By 1979 the Mediterranean Regional Trust Fund (the Trust Fund) was established to provide continuous and independent financial support for MAP.¹² Its administration was entrusted to the Secretary-General of the UN and, at his discretion, to the Executive Director of UNEP (Annex IX, Art.2), according to the UN Financial Regulations and Rules and the Financial Rules of the Fund of UNEP, properly modified.

The initial recommendation of the Parties was that the Fund be financed 50% by themselves and 50% by UNEP and the other UN organisations involved.¹³ This proposal met with firm resistance by UNEP which pressed for the countries of the region to assume primary financial responsibility for the development of MAP activities. Finally, UNEP's contribution was set at around 25%;¹⁴ while from the other UN organisations only UNDP agreed to participate in MAP's funding, but with no commitment as to a fixed percentage of the budget.¹⁵

The Trust Fund - which is reviewed every two years - initially comprised two sections: Section I covered expenditures for activities directly derived from the Barcelona Convention and its Protocols, while Section II covered other activities under MAP (Annex IX, Art.3). Section I was composed of contributions from Parties, according to a fixed scale, and voluntary contributions from

¹¹ See, P.Sands, *Principles of International Environmental Law*, Vol.1, 1995, Chapters 18 and 19, with relevant bibliography.

¹² See UNEP, Report of the Intergovernmental Review Meeting of Mediterranean Coastal States and First Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols, UNEP/IG.14/9, UNEP, 1979, Annex IX; and also Executive Director's Report on the Establishment of a Mediterranean Regional Trust Fund for the Protection of the Mediterranean Sea against Pollution, UNEP/IG.14/7, 4 December 1979.

¹³ See UNEP, Executive Director's Report..., *op.cit.* n.12, p.1.

¹⁴ *Ibid*, pp.2-3.

¹⁵ *Ibid*, p.3.

other states and non-governmental sources (Annex IX, Arts.5 and 6). Section II costs were incurred by the above sources and the EC, according to a cost-sharing scheme (Annex IX, Arts.10 and 11). This formalistic distinction was abandoned at the Sixth Ordinary Meeting of the Contracting Parties, where a single budgetary programme was adopted.¹⁶

The budget - amounting to approximately US\$ 6.5 million for 2001 - is geared towards meeting the administrative costs of MAP, and funding MED POL and the CAMPs,¹⁷ and typically covers the costs of Conferences, Consultations, and Meetings of the Bureau, Committees, the Parties, and Groups of Experts; special consultants and studies for the various components of MAP; training courses; publications; salaries of the staff of the various units; assistance to institutions participating in MED POL, either in kind or in money; and assistance in the implementation of the various components, usually in the form of expert advice.

The larger part of available funds was, during the first years, channelled to MED POL projects; for example, in 1981, 65% of the funds went to MED POL, 17% to REMPEC, 15% to the Blue Plan, and 2% to PAP.¹⁸ This does not come as a surprise, in view of the fact that development of the scientific assessment component of MAP was a privileged field of common action and a prerequisite for the elaboration of concrete control rules. As the MAP as a whole and its legal component matured, however, this balance was altered, and in the 1995 budget, MED POL activities accounted for 21.4% of the total expenses, with activities for the implementation of the Barcelona Convention taking up 32.3%, management of coastal areas 15.9%, programme support costs 10.7%, activities for the implementation of the Emergency Protocol, including the operation of REMPEC, 10.5%, activities for the implementation of the Geneva Protocol, including the operation of SPA/RAC, 6.3%, whilst those for the implementation of the Athens and Dumping Protocol an insignificant 2.6%.

A notable characteristic of the Trust Fund is its scale system, under which contributions are determined equitably according to the financial capabilities of the states. Although fair in its inception, this system grants an increased controlling power to the four major contributors, i.e. France, Italy, Spain and the EU,¹⁹ and leads to a heavy dependence of the overall implementation

¹⁶ UNEP, Report of the Sixth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its related Protocols, UNEP(OCA)/MED IG.1/5, 1 November 1989, Annex VI.

¹⁷ On MED POL, see *supra* Chapter 5, pp.195-7.

¹⁸ As calculated by P.Haas, in *Saving the Mediterranean - The Politics of International Environmental Co-operation*, 1990, p.126. The author considers that this proves the preoccupation of UNEP - which was still a main contributor at the time and had large discretionary control over the allocation of the budget from the position of administrator - to maintain its privileged alliance with the marine scientists of the region.

¹⁹ The contributions of the three first countries for the biennium 1994-1995 accounted for 68.61% of the total (France 30.32%, Italy 25.05% and Spain 11.97%); if EU (13.24%) and Greek (10.14%) contributions are added, then 91.99% of the total funds is reached, which leaves sixteen countries offering a slim 8.01%, see UNEP, Report of the Eighth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and related Protocols, UNEP(OCA)/MED IG.3/5, 15 October 1993, Annex V, p.1.

of MAP on their conduct.²⁰ This reality acquires more importance in view of the fact that states are notoriously late in discharging of their financial obligations.²¹ In fact, the Deputy Executive Director of UNEP did not hesitate, in 1987, to threaten with closing down of projects and regional centres, unless payments were immediately received, since the cash available at the time was sufficient to cover MAP costs for just one a month!²²

In an effort to cure this malfunction,²³ the Parties agreed to create a Revolving Fund, on an experimental basis.²⁴ This Fund possesses an initial capital (\$ 1,788,699) that is to be used for activities already approved, but which cannot be covered by the Trust Fund for reasons of delays in the payment of contributions. Priority is given to activities involving countries lacking the necessary national capabilities, and the amounts used are re-deposited in the Fund, when contributions are eventually paid.

Pledges not forthcoming is not the only problem the MAP fund is faced with, however. In 1987, the Fifth Meeting of the Parties - significantly, the first after the adoption of the ambitious Genoa Declaration - expressed a characteristic resistance to the Executive Director's proposals to increase the budget for the 1988-89 biennium by 15%.²⁵ Both the developing and the developed Parties put forward various arguments against, ranging from "the precarious situation of the world economy" to the specific financial burden for particular countries in the proposed budget. The general attitude which was reflected in the final decision was in favour of a modest increase of 5%, and of a more 'prudent' and efficient management of existing financial resources. Thus, the acceleration of activities as envisaged by the Genoa Declaration was halted,²⁶ and in effect, a part of MAP's planned activities had to be cut down.

That was not the only time that financial allocations, however insubstantial, caused distress

²⁰ However, Raftopoulos points out that the dynamic character of the institutionalised re-negotiation of the Fund every two years, and the public status of the contributors which is a factor restricting the discretionary exercise of their powers, as well as the possibility for any Party to make voluntary contributions, e.g. through the hosting of special offices and Centres, balance the excessive power of the main contributors, E. Raftopoulos, *The Barcelona Convention and Protocols - The Mediterranean Action Plan Regime*, 1993, pp.70-2.

²¹ See e.g. UNEP, *op.cit.* n.16, Annex IV, p.4, where it is stated that in October 1989 contributions were \$4 million in arrears. The same amount was overdue in 1991, see UNEP, *op.cit.* n.4, Annex III, p.3; whereas by 1993 it had reached \$4.5 million, see UNEP, *op.cit.* n.19, p.7. Having said that, some countries of the region are sometimes genuinely incapable of meeting their financial obligations, see, for instance, the decision of the Parties to waive Lebanon from paying its outstanding arrears up to the end of 1990, in UNEP, *op.cit.* n.4, Annex IV, p.15 at F.9.1.

²² See UNEP, Report of the Fifth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea and related Protocols, UNEP/IG.74/5, UNEP, 28 September 1987, Annex III, p.3.

²³ And in view of a budgetary deficit of \$2,423,731 in 1993.

²⁴ UNEP, *op.cit.* n.19, p.21. Notwithstanding general approval, one representative expressed the hope that the existence of the Fund would not lead to further negligence in the payment of contributions; this is undoubtedly a potential side-effect of the new institution.

²⁵ See UNEP, *op.cit.* n.22, pp.8 and 19-21.

²⁶ See relevant remarks of the Executive Director, in *ibid.* p.22. Nevertheless, the Parties requested the Secretariat jointly with the EC to assess the costs of the specific objectives of the Genoa Declaration and the needs deriving from them, presumably for future consideration, see *ibid.* p.52.

in a Meeting of the Parties. A relevant account by Professor Vucas, present at the Fourth Meeting,²⁷ which produced the Genoa Declaration itself, best describes the climate during such discussions:²⁸

“On the other hand, every observer at the Genoa Meeting lost any enthusiasm he had for sincerity and friendly co-operation when the budgetary questions came up. During the last two days of the Meeting the main contributors fought with incredible persistence to lower the 10% increase..., suggested by the Secretariat... The smallest contributors (2,165 US\$ annually!) insisted on adopting the same percent (10%) of increase for all States; for each of them it would mean an increase of 217 US\$ and for the biggest contributors 110,824 dollars for 1986. Eventually the Meeting took the decision to raise the contributions of all States by approximately 5%... Watching this long financial bargaining one had the impression that delegations thought they were negotiating contributions to a quite unnecessary and frivolous undertaking, and not attempting to satisfy the targets their heads adopted in the Genoa Declaration.”

The same pattern of a 5% increase is followed almost without exception every time a new budget is discussed,²⁹ even at times when the Parties commit themselves in other *fora* - as, for example, in UNEP's Governing Council - to substantial increases in relevant budgets.³⁰

Despite the problematic operation of the Trust Fund, some still view its existence as the main reason why MAP has maintained its impetus towards goals still unattained.³¹ Professor Raftopoulos, for instance, believes that the Trust Fund creates a noteworthy incentive for constructive compliance among the donors who, through the control they exercise over the budget, co-operate and ‘compete’ with each other as to the implementation of MAP, at least to the degree that they expect to draw some important technical and political benefits from this.³² Indeed, MAP has always been conceived both by the Parties and by UNEP officials, as a pure ‘co-operation’ regime, in which states are not expected to concede too many powers and/or money to the international organisation.³³ Be that as it may, the significance of a robust financial mechanism goes beyond what has been already discussed to direct compliance control. In the words of the same official, “states will accept compliance control only if they expect some financial gain”, as best

²⁷ The Genoa Meeting also approved the Programme Calendar for 1986-1995, whereby alternative assessment methods of apportionment to the Trust Fund should be developed by 1987, the Trust Fund should be changed to a capital fund by 1990, and direct appeal for funds to the public for selected projects of regional significance should be effected by 1995, see UNEP, Report of the Fourth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and related Protocols, UNEP/IG.56/5, 30 September 1985, p.31.

²⁸ See B.Vucas, ‘The Protection of the Mediterranean Sea against Pollution’, in U.Leanza (ed.), *The International Legal Regime of the Mediterranean Sea*, 1987, pp.432-3.

²⁹ With the exception of the 1992-93 budget, which saw contributions increasing by 10% for each of the two years, see UNEP, *op.cit.* n.4, p.11. At the 1996 Meeting a proposal for a 7% increase in view of the expanded needs created by the introduction of MAP II, was extensively discussed and watered down to a 3.5% increase in ordinary contributions with an additional 3.5% as extraordinary contributions, see UNEP, Report of the Extraordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and related Protocols, UNEP(OCA)/MED IG.8/7, 1996, pp.4-7.

³⁰ See UNEP, *op.cit.* n.16, Annex IV, p.4.

³¹ See, for instance, D.Edwards, ‘Review of the Status of Implementation and Development of Regional Arrangements on Co-operation in Combating Marine Pollution’, in J.E.Carroll (ed.), *International Environmental Diplomacy*, 1988, p.272.

³² See E.Raftopoulos, ‘The Barcelona Convention System for the Protection of the Mediterranean Sea against Pollution: An International Trust at Work’, 7(1) *I.J.E.C.L.*, 1992, p.40.

³³ According to Ibrahim Dharat, MAP Programme Coordinator, from interview with the author.

illustrated in the case of the Montreal Protocol regime.³⁴

All said, one can justifiably conclude that the MAP budget has been and still is characteristically humble,³⁵ suitable only for support and co-ordination actions, and does not address the issue of the great cost of substantive anti-pollution measures. The main sources of international funding for such activities are provided by the EU and the EIB, and by the World Bank and GEF, as will be shown in subsequent sections.³⁶ It must be noted, in this connection, that, UNEP, operating in the framework of MAP, has always facilitated interested states in identifying environmental projects and negotiate aid for their implementation with various other donors.³⁷ What is more, the Secretariat lately seems ready to formally assume a more rigorous advisory and supportive role in helping individual countries acquire additional, and presumably more substantive, funding.³⁸

6.1.2. Compliance Assistance under the Barcelona Convention and Protocols.

Apart from the Trust Fund, scientific and technological co-operation obligations, which work towards facilitating compliance, are also present under the Barcelona Convention: Article 13 lays down this general duty of co-operation without further qualifications or specifications. As far as developing states of the region are concerned, however, it creates an additional duty for the Parties, namely to co-operate in the provision of technical and other possible assistance in fields relating to marine pollution.

This provision is not directly relevant to the costs of implementation of substantive measures to reduce marine pollution, but is nevertheless important in that it identifies lack of appropriate expertise and infrastructure in developing countries as a main impediment to designing and putting into practice effective environmental programmes. As Professor Raftopoulos puts it, if a Party has failed to carry out some duty laid upon it by virtue of its status, traditional remedies may be either inadequate or futile for securing compliance. The reason is that non-compliance cannot really be abstracted from the level of the economic development of each Party which fundamentally

³⁴ See *supra*, Chapter 5, pp.219-20.

³⁵ Note, e.g., that the small island states of the Caribbean Action Plan contribute annually more to their fund than a number of Mediterranean states to theirs, see UNEP, *op.cit.* n.16, Annex IV, p.5.

³⁶ While other innovative ideas such as the establishment of a voluntary regional fund to finance environmental activities, with money derived from alternative sources, like, for instance, the charging of a nominal fee on airline tickets purchased by tourists visiting the region, have not been seriously considered as yet, see UNEP, *op.cit.* n.16, p.6; and UNEP, *op.cit.* n.4, Annex III, p.5.

³⁷ See UNEP, *op.cit.* n.22, p.52. It is surprising, therefore, that the Deputy Coordinator of MAP, in response to an inquiry regarding the various sources of funding and the results achieved, replied that the Unit has "no relevant information since this topic is not in our programme", letter of 22 April 1996 with the author.

³⁸ See UNEP, *op.cit.* n.29, p.24; and UNEP, Report of the Tenth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, UNEP(OCA)/MED IG.11/10, 3 December 1997, Annex IV, Appendix II, pp.49 *et seq.*, for a GEF-funded study by the Secretariat concerning proposed investments in the area of land-based pollution control from 1998 to 2008 at an estimated cost of around \$10 billion; and see *infra*, p.278.

affects policy decisions on environmental issues, nor can it be dissociated from the differentiated responsibility of each State in the contribution to the pollution problems.³⁹

Acknowledging this reality, the Athens Protocol is more detailed with regard to compliance facilitation and assistance to developing countries:

“Article 10. Technical Assistance.

1. The Parties shall, directly or with the assistance of competent regional or other international organizations, bilaterally or multilaterally, co-operate with a view to formulating and, as far as possible, implementing programmes of assistance to developing countries, particularly in the fields of science, education and technology, with a view to preventing, reducing or, as appropriate, phasing out inputs of pollutants from land-based sources and activities and their harmful effects in the marine environment.

2. Technical assistance would include, in particular, the training of scientific and technical personnel, as well as the acquisition, utilization and production by those countries of appropriate equipment and, as appropriate, clean production technologies, on advantageous terms to be agreed upon among the Parties concerned.”⁴⁰

This is a compromise solution, criticised by both sides, i.e. developed and developing countries. The former disagree with the “advantageous terms” provision, while the latter deplore the qualification “as far as possible” which deprives implementation of assistance programmes of its compulsory force.⁴¹

Comparable formulations are also found in the other instruments (Emergency Protocol, Art.10; Offshore Protocol, Art.24; and Hazardous Waste Protocol, Art.10). All of them envisage a primarily technical type of assistance, something that is being done throughout the life of the Barcelona regime by means of the scientific and research component (MED POL) and the operation of regional centres such as REMPEC.

Direct financial assistance appears for the first time in the most recent Hazardous Waste Protocol. The relevant Article is short but with potentially great repercussions. It reads:

“Article 10. Assistance to Developing Countries.

The Parties shall, directly or with the assistance of competent or other international organizations or bilaterally, co-operate with a view to formulating and implementing programmes of financial and technical assistance to developing countries for the implementation of this Protocol.”

As we already noted,⁴² the Hazardous Waste Protocol essentially establishes broad obligations to develop and apply clean production processes so as to minimise generation of hazardous wastes. In fact, it explicitly views transboundary movement of such waste as exceptional (Art.6). Consequently, the aid envisaged in Article 10 will in effect have to be directed mainly towards research in and application of clean production technologies in developing countries and therefore

³⁹ Raftopoulos, *op.cit.* n.20, p.63.

⁴⁰ The necessity of such direct assistance was reaffirmed at the Fifth Meeting, see UNEP, *op.cit.* n.22, p.77.

⁴¹ On the relevant negotiations, see P.A.Bliss-Guest, ‘The Protocol against Pollution from Land-Based Sources: A Turning Point in the Rising Tide of Pollution’, 17 *Stanford J.I.L.*, 1981, p.275.

⁴² See *supra*, Chapter 2, p.85.

has a far-reaching potential, as long as it does not remain in paper.

It is true that the issue of expert technical assistance, training, and transfer of technology to developing states in the Mediterranean often comes up at the Meetings of the Parties, especially in connection with implementation of the Athens Protocol,⁴³ but there has not been any distinct decision setting out particular arrangements or procedures to this effect, although research into land-based pollution in the Mediterranean is indeed carried out and the findings shared. It is characteristic that the work plan for implementation of the Athens Protocol during 1986-87 did not deal with Article 10;⁴⁴ however, the Parties did resolve that direct assistance should be provided to facilitate national implementation of the Protocol, mainly in the form of expert visits and local training.⁴⁵ As late as 1991, MAP's budget comprised \$85,000 under the heading 'assistance to countries to implement the LBS Protocol',⁴⁶ which was reduced to \$20,000 for each of the years 1994 to 1996.⁴⁷

The only areas where assistance has had some significant impact are the long-established programmes related to spill response through REMPEC activities, and monitoring in the context of MED POL. In fact, in an effort to accelerate the development of national monitoring programmes in several countries which are lagging behind, the Secretariat has 'stretched the rules' and provided support, training and even equipment for programmes that did not have clear legal status;⁴⁸ nevertheless, this did not substantially improve the situation as far as fulfilment of specific legal obligations in beneficiary countries is concerned.

An example of initiatives seeking to provide such assistance is given by the 1993 Memorandum of Understanding signed between MAP and the Centre for Environment and Development for the Arab Region and Europe (CEDARE),⁴⁹ whereby CEDARE undertook to grant technical support for the two CAMPs in Egypt and Tunisia, and to set up a Training Centre for the preparation of national environmental master plans, the latter supported with the technical expertise of MAP. Furthermore, MAP and CEDARE are jointly promoting capacity building in remote sensing; they are developing joint scientific projects in the field of water quality; and are co-operating, in the 'Blue Plan' context, in the development of the 'Mediterranean Environment

⁴³ See e.g., UNEP, *op.cit.* n.27, p.6; UNEP, *op.cit.* n.22, pp.68 at h, and 77 at a; UNEP, *op.cit.* n.16, pp.7-8.

⁴⁴ See UNEP, *op.cit.* n.22, p.71-76.

⁴⁵ *Ibid.*, p.77.

⁴⁶ See UNEP, *op.cit.* n.4, Annex IV, p.35.

⁴⁷ See UNEP, *op.cit.* n.19, Annex VI, p.6; and UNEP, Report of the Ninth Ordinary Meeting of the Contracting Parties to the Barcelona Convention and related Protocols, UNEP(OCA)/MED IG.5/16, 8 June 1995, Annex XIII, p.17.

⁴⁸ See UNEP, *op.cit.* n.16, Annex IV, pp.2-3.

⁴⁹ See *MedWaves*, No.27, Spring 1993, p.9. CEDARE aims at building the capabilities of Arab states of the Mediterranean with a view to sustainable development, and interestingly allows for participation of non-Mediterranean states, see A.E.Chircop, 'The Mediterranean Sea and the Quest for Sustainable Development', 23 *O.D.I.L.*, 1992, pp.25-6.

Observatory' and in establishing closer relations with Arab countries.⁵⁰

At a more recent development, the well-established form of technical, capacity-building assistance already existing in the framework of MAP is taken forward in MED POL III.⁵¹ The objective of the relevant programme element is to facilitate full participation of all Parties, not only to MED POL activities in the narrow sense, but also to promote implementation of action plans, programmes and measures for the control of marine pollution in the region, according to the Barcelona legal framework.⁵² To this effect, apart from advice and technical assistance for improving national monitoring programmes, support will be forthcoming with regard to legal, technical and fiscal policies, strategies and practices that will contribute towards implementation of effective measures to control marine pollution. This task will be co-ordinated by the Secretariat, and the cost will be primarily met by the Trust Fund.

6.2. Environmental Funding in the European Union.

There is a large array of financial instruments in the Community framework,⁵³ some of which are directed specifically to environmental research and investments, while others become relevant, despite their developmental or primarily economic objectives because of the explicit requirement therein to take into account environmental impacts when designing and implementing all Community policies. If this is properly effected, then the quality of the environment in Member States indirectly benefits from environmentally sound development and overall economic activities. This Section focuses exclusively on relevant mechanisms, and does not address some other interesting issues that have become very topical within the Community during the past few years, such as promotion of economic measures and fiscal instruments to bring about enhanced

⁵⁰ In particular in the initiation of 'observatories' at national level in order to foster observation and evaluation of the environment in the Arab Mediterranean countries. On the Blue Plan, see *supra*, Chapter 1, fn.25. It should be noted in this connection that, in 1987, the International Ocean Institute instigated the establishment of a Mediterranean Centre for Research and Development in Marine Industrial Technology to facilitate developing countries' acquisition of skills necessary for the maximisation of benefits from resource rights accruing to them under the new law of the sea, and in particular Articles 276 and 277 of the LOSC calling for the establishment of regional marine scientific and technological centres, especially in developing countries. The most notable feature of this initiative, as envisaged, is that it would promote 'co-development', as opposed to 'transferal' of technology, so as to allow states in the South and East of the basin to build their own capabilities. A feasibility study was commissioned by the UNIDO - in co-operation with UNEP - and was completed in 1989, see UNIDO, Report of the Meeting of Experts on the establishment of a Mediterranean Regional Centre for Research and Development in Marine Industrial Technology, UNIDO/IPCT.85 (SPEC.), 1989. However, lack of political and economic support from the European Community, and especially France and Spain, who do not seem willing to bear the costs for such a project, together with competition between potential host countries, such as Malta, Egypt, and Morocco, have led to setting back of the actual establishment of the Centre to date.

⁵¹ See UNEP, *op.cit.* n.29, Annex IV, Appendix.

⁵² See *ibid.*, p.23 at 7.3; and *supra*, Chapter 5, p.197

⁵³ For a succinct historical account and critical analysis of Community environmental funding, since its emergence in 1982, see EC Commission, Progress Report on implementation of the LIFE Regulation and evaluation of the action by the Community relating to the environment ACE, MEDSPA, NORSPA and ACNAT, COM(95) 135 final - 95/0093 (SYN), 12.04.1995.

environmental protection, for example 'green taxes', subsidies and state aids,⁵⁴ as these still relate rather to domestic policy and Community competition rules than to any type of international environmental funding.

When approaching the issue, one must always bear in mind that Community financial assistance towards implementation of the Member States' legal obligations is in theory restricted by two central tenets that guide EC environmental policy, namely the 'polluter pays' principle, and that of 'subsidiarity'.⁵⁵ The former implies that those responsible for pollution must bear the costs of compliance with the standards or quality objectives in force. Nevertheless, the Community accepts that deviation from the principle, and thus Community funding, is allowed where the immediate application of very stringent standards is likely to cause serious economic disruption. This can be the case when extensive public investments become mandatory, for example to put in place urban and industrial waste treatment facilities, what is termed under Article 175(5) of the EC Treaty "costs deemed disproportionate for the public authorities of a Member State". Deviations from the principle are also tolerated where, in the context of other policies, environmental investment is designed to resolve certain structural problems of a regional or sectoral nature, as long as the aid granted complies with the provisions of the EC Treaty, and in particular with those seeking to ensure that it is not used in such a way as to distort competition (Arts.92 and 93).⁵⁶

In addition to these general exceptions, there are other activities not regarded by the Community as contrary to the 'polluter pays' principle, for example, financial contributions to local authorities to build or manage public environmental protection facilities, where the expenditure cannot at the time be totally covered by the charge levied on the polluters using such facilities; other types of public investment such as site restoration, where the pollution at hand is the result of past activities or the party responsible cannot be identified; or expenditures complementing the application of the principle by, for instance, granting resources for the development of public transport; or initiatives at the international level where financial support is justified on the grounds of interest, effectiveness or solidarity; funds to offset particularly large burdens imposed on certain polluters to achieve an exceptional level of environmental quality; and contributions granted to

⁵⁴ See, among others, Sands, *op.cit.* n.11, pp.131-2 and 718-22; A.Hughes, 'Economic Measures to Protect the Environment', 16(1) *Mar.Pol.*, 1992, pp.36-42; I.Gispert, 'Fiscal Instruments in the EU: Are we Moving towards Ecological Tax Reform?', 4(11) *Eur.Env'l L.Rev.*, 1995, pp.305-11; S.C.Budlong, 'Article 130r(2) and the Permissibility of State Aids for Environmental Compliance in the EC', 30 *Columbia J.of Trans'l.L.*, 1992, pp.431-69; and J.H.Jans, 'State Aid and Articles 92 and 93 of the EC Treaty: Does the Polluter Really Pay?', 4(4) *Eur.Env'l L.Rev.*, 1995, pp.108-13.

⁵⁵ See Fifth Environmental Action Programme, in EC, *Towards Sustainability: A European Community Programme of Policy and Action in Relation to the Environment and Sustainable Development*, 1993 *O.J.* (C 138) 1; and EC Commission, Proposal for a Council Regulation establishing a Financial Instrument for the Environment (LIFE), COM(91) 28 final, 31 January 1991, pp.7-10.

⁵⁶ See EC Commission, *op.cit.* n.55, p.8.

promote research and development of clean technologies and production.⁵⁷

In principle, the Community can take action with regard to environmental protection only to the extent that the objectives sought can be better attained at Community level than at the level of the individual Member States (Art.5). This 'principle of subsidiarity' - what is usually referred to as 'action at the most suitable level' - runs through the totality of Community policies and activities, and consequently guides the commitment of its budgetary resources. Although Community activities to respond to transfrontier or global pollution problems are readily justified - and even become imperative in order to ensure economic and social cohesion or prevent distortion of competition or trade barriers -, direct Community funding to assist the application of Community law seems basically incompatible with the principle.⁵⁸ In theory, financial aid from the Community is legitimate only when it promotes speedier implementation of relevant provisions or implementation of more stringent rules, but in practice this distinction loses much of its meaning in view of the fact that facilitation of application of the minimum standards themselves is, in the Commission's view, an effective way of encouraging the adoption of tougher ones, especially in countries facing serious implementation problems in a certain area.⁵⁹

The principle that Member States themselves have to finance and implement their environmental policy is reiterated in the EC Treaty (Art.175(4)). However, at the same time, poorer countries are explicitly allowed to invoke their inability to meet expenses that are "deemed disproportionate" for their budgets and obtain temporary derogations from mandatory Community provisions and/or assistance from the Cohesion Fund (Art.175(5)), which, as will be explained later, is one of the main sources of environmental funding for the Mediterranean Member States.

The financial mechanisms that are deemed more relevant for present purposes and will be examined in the following sections are the Cohesion and Structural Funds; and the ENVIREG, MEDSPA, and LIFE programmes; as well as funding from the European Investment Bank (EIB) outside these instruments. This does not imply that the above are the only financial instruments applying to Mediterranean countries, however. The Integrated Mediterranean Programmes (IMP),⁶⁰ in particular, specifically address the developmental needs of the region, but have been severely criticised as ineffective and even damaging, particularly as far as environmental protection is concerned.⁶¹ In fact, funding under the IMP is generally not conditioned upon compliance with Community environmental policy, except from some specific rules explicitly mentioned in contracts

⁵⁷ *Id.*

⁵⁸ See *ibid*, pp.9-10.

⁵⁹ See *ibid*, p.10.

⁶⁰ See Council Regulation 2088/85 concerning the Integrated Mediterranean Programmes.

⁶¹ It is characteristic that there is no reference whatsoever to environmental protection in the Regulation governing the IMP, see *ibid*. See also D.Baldock & T.Long, 'Bad News for the Environment: The EC's Integrated Mediterranean Programmes', *European Environmental Report*, Dec.1987, p.15; and G.Kütting, 'Mediterranean Pollution - International Co-operation and the Control of Pollution from Land-based Source', 18(3) *Mar. Pol.*, 1994, p.244.

on a case-by-case basis.⁶²

Importantly, the MEDSPA and LIFE programmes and the EIB have provided resources to third Mediterranean countries as well. This aspect of Community funding is particularly important as it has the potential to be linked with environmental conditions and thus act as a compliance incentive, especially in the context of aid under the various stages of the Community Mediterranean Policy and the recent MEDA programme, which are also examined below.

6.2.1. The Cohesion Fund.

Article 130d of the Maastricht Treaty (new Art. 161) provided for the creation of a Cohesion Fund, to benefit Member States on the 'periphery' of the Union, namely Spain, Portugal, Greece, and Ireland.⁶³ The Fund, set up in its current form in 1994,⁶⁴ seeks to reduce excessive economic and social disparities, by reinforcing the structure and improve the prospects of balanced growth of the economies concerned, and thus help achieve the aim of economic and monetary union by the end of the century.⁶⁵

This instrument is devoted to the development of trans-European transport networks and to environmental investments contributing to the achievement of the Article 174 objectives and, in particular, projects in line with the priorities laid down in the Fifth Action Programme for the Environment (Art.3(1)). The Cohesion Fund is, therefore, designed to fund projects involving costs that are deemed disproportionate to the public finances of the country concerned, in areas where any reduction in public investment because of strict budgetary discipline would be extremely damaging; in fact, the countries receiving assistance have had to undertake that they will not reduce their own investments in the two sectors. The granting of assistance by the Fund is, accordingly, conditional on the Member State making a real effort not to run up an "excessive government deficit" (Art.6 and Annex II, Art.H), and in general on satisfactory progress towards fulfilment of the conditions of economic convergence.

Apart from substantive environmental measures, the Fund also finances preliminary studies related to eligible projects and their implementation, as well as technical support measures, in

⁶² See e.g. Commission Decision 88/317 approving an Integrated Mediterranean Programme for Central and Eastern Greece, where a general reference to the Community policy on the environment is absent from the Articles under Title VI (Compliance with Community Policies), save a specific requirement for prior environmental impact assessment under Directive 85/337 for a large project involving the diversion of a substantial part of the flow of a major river.

⁶³ That is, Member States with a *per capita* GNP of less than 90% of the Community average, which are undergoing a programme of economic convergence, pursuant to Article 104c of the Maastricht Treaty [new art.104] (Art.2(1)).

⁶⁴ A Cohesion Financial Instrument was established under Council Regulation 792/93, and was substituted by a Cohesion Fund under Council Regulation 1164/94. The latter has recently been amended by Council Regulations 1264 and 1265/1999.

⁶⁵ Hence, although distinct from the Structural Funds, the Cohesion Fund is also structural in nature, as is evidenced both by the fact that its establishment is provided for in Article 161 which governs the Structural Funds, and by the fields it covers, see EC Commission, Communication on the Cohesion Fund, COM(92) 339 final, 31 July 1992, p.2.

particular 'horizontal' ones such as comparative studies to assess the impact of Community assistance, measures and studies contributing to the appraisal, monitoring, supervision or evaluation of projects and to strengthening and ensuring their co-ordination and consistency, and measures and studies helping to make the necessary adjustments to the implementation of projects (Art.3(2)).

The level of assistance varies between 80 and 85% of the public expenditure on the project (Art.7), which is much higher than that provided, for instance, by the Structural Funds.⁶⁶ Preparatory studies and technical support for the preparation of a project can receive 100% financing, particularly if they are undertaken at the Commission's initiative. Under the Cohesion Fund, ECU15.15 billion were provided for a period of seven years - i.e. until the end of 1999 -, rising from ECU1.5 billion in 1993 to more than ECU2.6 billion in 1999 (Art.4); while for the years 2000 to 2003 appropriations are set at EUR2.615 billion *per annum*. The indicative allocation of these resources among the four countries concerned (Annex I) shows that the larger part is channelled to Mediterranean states.⁶⁷

Unlike the Structural Funds, for Cohesion Fund's operations the Community's partners are national rather than local or regional authorities (Art.10(1) and (3)). Moreover, action here is based on specific projects and not on comprehensive programmes. However, projects assisted by the Cohesion Fund may contribute to the implementation of programmes financed by the Structural Funds,⁶⁸ but the same stage of a single project cannot receive aid from both sources (Art.9(1)).⁶⁹ Another eligibility criterion is compliance of the proposed project with all Community policies, including that concerning environmental protection (Art.8(1)). For a project to qualify for assistance under the Cohesion Fund, it must be "of a sufficient scale to have a significant impact in the field of environmental protection or in the improvement of trans-European transport infrastructure networks" (Art.10(3)); the total cost of a project or group of projects may not, therefore, normally be less than ECU10 million.⁷⁰

The yardsticks used to assess the quality of a project are its medium-term economic and

⁶⁶ See *infra*, p.259.

⁶⁷ Spain receives 52 to 58% of the total, Greece and Portugal 16 to 20%, and Ireland 7 to 10%. For the main points of decisions to grant Cohesion Fund assistance for projects undertaken, see 1996 *O.J.* (C 244) 1; and 1996 *O.J.* (C 270) 1. For the period 2000 to 2006 the respective percentages will be 61 to 63.5%, 16 to 18%, and 2 to 6%.

⁶⁸ Provided that total Community assistance does not exceed 90% of total expenditure.

⁶⁹ See also EC Commission, *op.cit.* n.65, p.6.

⁷⁰ This has been criticised on the grounds that it effectively rules out small labour-intensive environmental projects in favour of big infrastructure schemes usually related to transport, see D.Wilkinson, 'Using the European Union's Structural and Cohesion Funds for the Protection of the Environment', 3(2/3) *R.E.C.I.E.L.*, 1994, pp.124-5; and C.Coffey & M.Fergusson, 'European Community Funding for Sustainable Development: The Role of the Cohesion Fund', 6(1) *R.E.C.I.E.L.*, 1997, p.80.

social benefits,⁷¹ which have to be commensurate with the resources deployed (Art.13(2) and (3));⁷² the priorities established by the recipient Member-State; the contribution the project can make to the implementation of Community policies on the environment and transport;⁷³ its compatibility with Community policies and consistency with other structural measures;⁷⁴ and the establishment of an appropriate balance between the fields of environment and transport (Art.10(5)).⁷⁵ In practice, the application for assistance under the Fund has to state (i) to which environmental objectives the project relates; (ii) how it is linked to the implementation of Community environmental legislation; and (iii) whether the project is consistent with a plan and programme associated with the implementation of Community policy or legislation.⁷⁶ If it is deemed necessary, relevant conditions are attached to the final decision.⁷⁷

Additionally, before approving a decision to fund a project, DG XI is always consulted in order to ensure that the proposal under consideration will effectively implement Community rules on the environment, and the Commission always examines whether Directive 85/337 on environmental impact assessment has been complied with.⁷⁸ It must be noted in this context that for transport actions submitted for funding a prior environmental impact assessment is mandatory (Art.13(4)). Be that as it may, one of the most official sources, i.e. the European Court of Auditors, has pointed out that the Commission has approved at least two such projects in Spain, for which the environmental impact had not been assessed.⁷⁹ Moreover, assessments actually undertaken are sometimes found to be lacking.⁸⁰ The Court of Auditors also points out that "the contribution of the financial instrument to projects that are concerned with the practical application of the directives based on Article 175 of the Treaty, and in particular those relating to the treatment of urban

⁷¹ See EC Commission, *Cohesion Financial Instrument - Cohesion Fund - Combined Report 1993-1994*, 1995, p.69.

⁷² But, according to the European Court of Auditors, analyses of this kind are sometimes missing. Where they exist, they have generally been carried out by the Member States, possibly after work has started, or even after it has been completed, see European Court of Auditors, Special Report No. 1/95 on the Cohesion Financial Instrument together with the Commission's replies, 1995 *O.J.* (C 59) 1, at para.4.20.

⁷³ EC Commission, *op.cit.* n.71, pp.70-7.

⁷⁴ *Ibid*, pp.85-8.

⁷⁵ There is no *a priori* breakdown between environment and transport actions; the relevant decisions are left to be considered by the Member States concerned and the Commission, which should ensure "a reasonable balance" between the two fields, see also Art.10(2); and EC Commission, *op.cit.* n.65, p.3. In 1993, about 40% of the funds distributed went to environment projects and 60% to transport, see EC Commission, *op.cit.* n.71, p.78; while by 1995 the ratio was 48.2% for the environment and 51.8% for transport, see EC Commission, Annual Report of the Cohesion Fund 1995, COM(96) 388 final, 4.09.1996, p.62.

⁷⁶ See EC Commission, *op.cit.* n.71, p.79.

⁷⁷ Most of the cases where this has been done concern compliance with the Directives on urban waste water treatment, environmental impact assessment, or water quality, see *id.*

⁷⁸ See EC Commission, *op.cit.* n.75, p.61.

⁷⁹ See European Court of Auditors, *op.cit.* n.72, at para.2.10.

⁸⁰ See *ibid*, at para.3.7, where two water projects in Spain and Greece are given as examples; and Coffey & Fergusson, *op.cit.* n.70, p.82.

wastewater and waste, is somewhat limited. A number of small-scale projects concerning sewerage systems do not include the purification of the effluent".⁸¹

As far as implementation of supported projects is concerned, the Commission and the beneficiary country must ensure that it is closely monitored in order to guarantee adherence to the objectives of the Fund, and that the projects are carried out efficiently (Arts.12 and 13).⁸² To this effect, particular Decisions approving projects lay down detailed rules for monitoring and assessment (Art.13(6) and Annex II, Art.F), typically providing for national Monitoring Committees, reports, and sample checks.⁸³ This arrangement is complemented by a Regulation concerning irregularities and the recovery of sums wrongly paid,⁸⁴ aiming to combat fraud and provide the resources with a view at establishing an information system on irregularities.

After Cohesion Fund assistance has been granted, compatibility with environmental legislation continues to be checked by the Monitoring Committees during execution of the activities, and, when conditions imposed are not respected,⁸⁵ assistance can be reduced or cancelled.⁸⁶ In fact, payments have in the past been suspended on the grounds of non-compliance with Community environmental policy in specific cases involving projects in Greece.⁸⁷ A last notable feature of the follow-up process is the possibility for inspection missions undertaken by the Commission, under Article 12 of the Cohesion Fund Regulation, to monitor the management and sound implementation

⁸¹ European Court of Auditors, *op.cit.* n.72, para.3.8. But it seems that in Spain and Greece the situation is rather different with regard to wastewater infrastructure funded by the Cohesion Fund, see *infra*, p.258.

⁸² See EC Commission, *op.cit.* n.71, pp.95-100. Note also in this context Commission Decision 96/455 concerning information and publicity measures to be carried out by the Member States and the Commission concerning the activities of the Cohesion Fund, which aims at increasing public awareness and transparency of relevant Community action in Member States.

⁸³ See e.g. Commission Decision 94/422 concerning the grant of assistance from the Cohesion Financial Instrument to the project concerning the water supply in Seville in Spain, at Annex IV. On the 1993-94 and 1995 work of the Monitoring Committees in Greece and Spain, see EC Commission, *op.cit.* n.71, pp.95-7; and *op.cit.* n.75, pp.81-5 respectively. See also European Court of Auditors, *op.cit.* n.72, at para.6, for a discussion of the difficulties experienced in the monitoring procedure.

⁸⁴ Council Regulation 1831/94 concerning irregularities and the recovery of sums wrongly paid in connection with the financing of the Cohesion Fund and the organisation of an information system in this field.

⁸⁵ However, this procedure does not always work effectively. For instance, "in the case of the Adra bypass (Spain), the Commission Decision makes the second payment conditional upon the Spanish authorities' undertaking to apply corrective measures so as to minimise the adverse effects on the environment. This undertaking, just like the environmental impact study, was nevertheless made after the date of completion of the work, and therefore took place at a time when it was no longer possible to consider alternative solutions or other changes. The corrective measures are thus likely to have no more than a marginal effect on the project, apart from their additional cost", see European Court of Auditors, *op.cit.* n.72, at para.4.24.

⁸⁶ This is explicitly provided for in the relevant Decisions, see e.g. Commission Decision 94/718 concerning the grant of assistance from the Cohesion financial instrument to the stage of project concerning the drainage and biological clean-up of the region of Loutrakion in Greece, at Annex VI; and Commission Decision 94/712 concerning the grant of assistance from the Cohesion financial instrument to the project concerning the recovery of water from the washing of tanks, cleaning of bilges and deballasting of ships in Spain, at Annex VI.

⁸⁷ See EC Commission, *op.cit.* n.75, p.85.

of the projects approved.⁸⁸

According to the mandatory annual report (Art.14(1), and Annex to Annex II) of the Commission to the EP concerning the activities of the Fund for the period 1993-1994, during the financial year 1994 Spain used 32.4% of the assistance it received (or ECU358.421 million) for environmental projects, while for Greece the relevant percentage was 85% (or ECU76.977 million).⁸⁹ A large part of this aid to both countries went to projects involving water quality control, sewage collection and treatment,⁹⁰ and control of industrial pollution, especially of the marine environment.⁹¹ It is characteristic of the increasing importance the Cohesion Fund acquires as a source of environmental funding that in 1993 approximately three hundred environmental projects, covering waste disposal facilities, sewage treatment plants, water supply and nature conservation measures,⁹² were submitted for approval by all countries eligible for assistance,⁹³ as compared with 1995, when Spain alone submitted applications covering almost eight hundred such projects, half of which related to drainage and wastewater treatment in implementation of Directive 91/271.⁹⁴ During the same year, Greece channelled 75% of the environmental assistance it received to an extended development of wastewater treatment infrastructure, a sector which, together with water supply and overall waste management, is distinctly lagging behind in this country.⁹⁵

All said, the European Parliament has been exerting its pressure to correct the malfunctions noted in Cohesion Fund spending during its years of operation, and has paid particular attention to compliance with Community environmental legislation and proper environmental impact assessments of projects proposed; in 1995, it has gone as far as threatening to withhold some of the 1996 budget if its terms were not met.⁹⁶ In response, the Commission adopted a Communication containing proposals for improved assessment of measures that have an indirect impact on the environment; for reviewing selection criteria towards more sustainable activities; for a more

⁸⁸ In fact, during 1995 there have been four inspections of projects related to the protection of the marine environment in Spain, and one inspection of a water supply and sewerage project in Greece, see *ibid*, pp.86-8.

⁸⁹ See *ibid*, p.15.

⁹⁰ See, e.g., Commission Decision 94/716 concerning the grant of assistance from the cohesion financial instrument to the stage of project concerning the water supply and sewerage for Mytilene in Greece.

⁹¹ The percentage of funds absorbed by different categories of environmental projects in Spain is as follows: water supply 35.9%; water quality control 11.9%; sewage collection and treatment 3.5%; erosion control and reafforestation 33.2%; nature conservation 8.1%; and control of industrial pollution 7%, *ibid*, p.22. The breakdown of assistance of Greece is: water supply 59%; waste water treatment 13%; waste management 1%; nature protection 7%; and protection of historic sites 2%, EC Commission, *op.cit.* n.75, p.40.

⁹² In this connection the Fund has been severely criticised as favouring projects applying 'end-of-pipe' technologies as opposed to preventative ones, see Wilkinson, *op.cit.* n.70, p.124..

⁹³ See EC Commission, Eleventh Annual Report to the European Parliament on monitoring the application of Community law, 1994 *O.J.* (C 154) 44.

⁹⁴ See EC Commission, *op.cit.* n.75, p.16.

⁹⁵ See *ibid*, pp.31-3.

⁹⁶ See Coffey & Fergusson, *op.cit.* n.70, p.84.

stringent attitude towards breaches of environmental legislation in the context of projects assisted by the Cohesion Fund; and for greater involvement of NGOs and the public in order to increase transparency and consistency with environmental objectives.⁹⁷ However, the opportunity for an in-depth evaluation and discussion in the light of past experience and for a re-orientation, so as to avoid giving Community support to environmentally destructive activities in the future, that was presented at the Fund's full review in 1999 was missed and the reform effort concentrated on bringing the Cohesion Fund up-to-date with the Economic and Monetary Union.

6.2.2. The Structural Funds.

The Structural Funds⁹⁸ have aims similar to those of the Cohesion Fund, but are also different in some important aspects: They seek to reduce regional disparities and cover apart from Spain and Greece, some southern areas of France and Italy, i.e. practically all Community regions bordering the Mediterranean; they attach no conditions to funding; in principle, no sector of activity is excluded; and, significantly, resources available are much larger - ECU172.5 billion from 1993 to 1999. As has been noted, projects receiving assistance from the Cohesion Fund are not eligible for funding from the Structural Funds; that also suggests, however, that an environmental project which does not meet the stringent conditions imposed under the former can turn to the latter.

The Regional Development Fund (ERDF),⁹⁹ is the principal Structural Fund for present purposes.¹⁰⁰ The Regional Policy was initiated in 1975 to reduce disparities between various regions of the Community and, especially, the backwardness of the least-favoured among them, which are overwhelmingly found in the Mediterranean South. After the accession of Greece, Spain and Portugal the funds devoted to this target multiplied and by 1986 reached ECU3 billion *per annum* as compared to ECU250 million in 1975. The cohesion objective of the European Single Act, and even more of the Maastricht Treaty, gave new impetus to the ERDF.

To receive funding from the ERDF, Member States submit development plans for a multi-annual period to the Commission, setting out development strategy and priorities at the national and regional level. On this basis the Commission and national and regional authorities negotiate the priority lines that will be co-financed by the Community - usually up to 50-70% of their cost - and the overall budget for that period. The agreement takes the conventional form of a Community Support Framework. This is followed by operational programmes submitted by the Member State for each of the priority lines to be adopted by the Commission.

⁹⁷ See *id*; and EC Commission, Cohesion Policy and the Environment, COM(95) 509.

⁹⁸ That is, the European Regional Development Fund (ERDF), the European Agricultural Guidance and Guarantee Fund (EAGGF Guidance Section), and the European Social Fund (ESF).

⁹⁹ As reformed in 1988 and 1993 by Council Regulations 2052/88 and 4253-4256/88; and Council Regulations 2081-2085/93.

¹⁰⁰ See G.Durand, 'Environmental Protection in EC Less-Developed Regions - Role of Regional Development Policy', 18(2) *Mar.Pol.*, 1994, pp.148-52.

Hence, choice of the projects that will eventually receive funding depends on the priorities set by the States themselves. After the reform, "productive investments and infrastructure to protect the environment, if related to economic activities" are included in the list of interventions eligible for co-financing. In fact, the Commission encouraged greater inclusion of environmental priorities in national plans, during negotiations for the 1989-93 programmes, as environment-related spending up to then accounted for only 5% of regional spending - or about ECU3 billion.¹⁰¹ In any case, the ultimate responsibility to integrate environmental protection in the development strategy for each region, especially in view of the fact that environmental actions not directly related to development do not qualify for funding from the Structural Funds, rests with local and national authorities and depends on their respective awareness.

As has been repeatedly noted, environmental legislation must be complied with in relation to all measures financed by the Community. In particular, environmental considerations must be integrated in the planning, application, control and evaluation stages of projects financed by the Structural Funds.¹⁰² However, as Fehr and van der Stelt-Scheele point out,¹⁰³ before the aforementioned reform there was no legal obligation on applicants to provide a full environmental impact assessment for proposed projects. After the reform, every Regional Development Plan submitted has to include an 'environmental profile' detailing, among others, the state of the environment and the foreseen environmental impact of the proposed development. In addition, every Community Support Framework specifies that all actions undertaken thereunder must observe Community environmental legislation, which importantly has to be transposed as a matter of priority. In addition, monitoring of adverse environmental effects of funded projects has to be carried out by the Monitoring Committees.

There are, nonetheless, serious doubts regarding the extent to which such obligations are properly fulfilled, as the administration responsible for implementing the Community Support Framework, is usually different from the one responsible for legal and/or environmental matters.¹⁰⁴ As suggested by the Special Report on the environment of the European Court of Auditors,¹⁰⁵ in practice Community environmental legislation is hardly taken into account when ERDF programmes are being carried out, the Monitoring Committees do not regularly perform such a function, nor is there any kind of consultation between the DGs managing the funds with DG XI. In other than

¹⁰¹ *Ibid*, p.149. It has also offered to assist Member States with any planning or operational matters through a programme of technical assistance, *ibid*, p.152.

¹⁰² See Council Regulation 2052/88, Art.7; EC Treaty, Art.6; EP, Resolution on the incorporation of environmental considerations in the Structural Funds, EP Doc.A3-326/92, 1993 *O.J.* (C 42) 236; and especially Council Regulation 2081/93, Arts.7(1), 8(4), 9(8) and 11a(2).

¹⁰³ H.Fehr & D.D.van der Stelt-Scheele, 'The EC Environmental Policy in relation to the EC Structural Funds: A Critical Analysis of its Application' (Part 1), 1(4) *Eur.Env't L.Rev.*, 1992, pp.122-3.

¹⁰⁴ See *ibid*, p.123.

¹⁰⁵ European Court of Auditors, *Special Report No.3/92 - Environment*, 1992.

explicitly 'environmental' projects, environmental aspects are taken into account only in the sense of a license that needs to be obtained.¹⁰⁶ Consequently, the environmental impact of projects financed by the ERDF would often be negative. The Report also attests that the greater part of Community funding goes towards investments that are little more than cleaning operations, as opposed to preventative measures aimed at the source of pollution and in accordance with 'polluter pays' principle.¹⁰⁷

That is why, financing by the Commission of various projects in Member States without taking into account their potential environmental effects is increasingly coming under scrutiny;¹⁰⁸ it is characteristic that the number of relevant complaints has risen from ten in 1982 to four hundred and eighty in 1990, and the legal proceedings from sixteen in 1982 to two hundred and twenty in 1990.¹⁰⁹ The European Parliament has, in particular, stressed this unacceptable use of certain structural funds, notwithstanding the positive set of rules that has been established as part of the reform thereof, with a view to ensuring that structural support is consistent with environmental policy and to allowing systematic monitoring, assessment and checks on structural operations, among others, in terms of environmental objectives.¹¹⁰ However, up to now there have been several cases of contradictory policy choices by the Community; for instance, the Commission has approved funding of projects with adverse environmental effects, while at the same time it has initiated Article 226 procedures against the recipient state for incorrect application of a relevant Directive.¹¹¹

The Commission is publicly admitting that the environment is one of the two areas where most infringements of Community law involving operations co-financed by the Structural or Cohesion Funds happen; the most common offence is failure to comply with the EEA Directive.¹¹² Despite difficulties in assessing the scope of relevant infringements, the Commission has also suspended or withdrawn funds in some occasions. It is currently considering a new revision of the Structural Funds, in order, among others, to increase their contribution to the objectives of

¹⁰⁶ See H.Fehr & D.D.van der Stelt-Scheele, 'The EC Environmental Policy in relation to the EC Structural Funds: A Critical Analysis of its Application' (Part 2), 1(5) *Eur.Env'l L.Rev.*, 1992, p.144; and Wilkinson, *op.cit.* n.70, pp.119-20.

¹⁰⁷ See Fehr & van der Stelt-Scheele, *op.cit.* n.106, p.145.

¹⁰⁸ For example, Greenpeace has challenged the disbursement of around ECU12 million in structural funds to Spain for the construction of two power plants in the Canary Islands, see Case T-585/93, 1995 *E.C.R.*, p.II-2205.

¹⁰⁹ See Fehr & van der Stelt-Scheele, *op.cit.* n.103, p.125.

¹¹⁰ See EP, Resolution on the Impact of the Community's Financial Instruments on the Environment, EP doc.A3-312/91, 1992 *O.J.* (C 13) 486, at p.488; and EP, Opinion on the establishment of LIFE, 1991 *O.J.* (C 267) 211, at Amend.No.8.

¹¹¹ For such instances concerning projects in Greece, see N.Παλαιολόγου, 'Θέματα Προστασίας του Ελληνικού Περιβάλλοντος Ενώπιον των Κοινοτικών Οργάνων', στο Γ.Παπαδημητρίου (επ.), *Η Διεκδίκηση του Κοινοτικού Δικαίου Περιβάλλοντος στην Ελλάδα* (N.Paleologou, 'Issues of Protection of the Greek Environment before Community Organs', in G.Papadimitriou (ed.), *The Infusion of Community Environmental Law in Greece*), 1994, p.188.

¹¹² See EC Commission, Sixteenth Report on monitoring the application of Community law, COM(1999) 301 final, 9.07.1999, pp.44-5.

sustainable development and environmental protection, with special emphasis on the urban environment and economic and social measures of a preventive nature, such as renewable sources of energy. Additional changes envisage a strengthening of the *ex ante* evaluation requirements, the information required in relation to large projects and an enhanced role for the competent environmental authorities in the preparation and implementation of programmes.¹¹³

6.2.3. ENVIREG.

If Community action on environmental protection is to take into account "the environmental conditions in the regions of the Community" and "the balanced development of its regions" (EC Treaty, Art.174(3)), general legislative measures applying to all Member States are not sufficient to provide assistance to the least developed marine areas in addressing their environmental problems without compromising their environmental needs. In recognition of that reality, coupled with the severe scale of environmental problems threatening coastal areas, and the fact that Member States had not had environmental projects high in their list of priorities in their 1989-93 development plans, the Community launched in 1990 a Programme for the Protection of the Environment and Promoting Economic Development (ENVIREG).¹¹⁴

Its general aim is to help the least-favoured regions tackle some of their environmental problems and thereby "put their economic and social development on a firmer footing", as well as to facilitate application of the Community's environmental policies at the regional level.¹¹⁵ Its specific objectives consist in abating pollution in coastal regions, especially in the Mediterranean, and principally around medium-sized towns whose economy depends significantly on tourism; promoting the planning of land use in coastal areas in such a way as to preserve natural beauty and enhance biotopes; contributing to a better control and management of toxic and hazardous waste; and strengthening know-how relating to the design and management of facilities for reducing pollution.

Projects to mitigate pollution of coastal areas that are eligible for ENVIREG funding - in the form of loans and grants towards covering a percentage of the total costs - include, among others, the construction or modernisation of sewage treatment plants, and infrastructures for collection and treatment of solid waste, in urban areas with fewer than 100,000 residents, in view of the fact that only a small part of wastewater in the Community's underdeveloped coastal regions is treated in a satisfactory way; studies, technical assistance and other services relating to the

¹¹³ See EC Commission, Proposal for a Council Regulation laying down general provisions on the Structural Funds, COM(1998) 131 final.

¹¹⁴ See EC Commission, Notice to the Member States laying down guidelines for operational programmes, which Member States are invited to establish within the framework of a Community initiative concerning the environment, 1990 O.J. (C 115) 3; and H.Somsen, 'The Regionalization of EC Marine Pollution Law: The Example of the Mediterranean Sea', 6(3) *I.J.E.C.L.*, 1991, pp.234-5.

¹¹⁵ See EC Commission, *op.cit.* n.114, p.3.

agricultural use of compost and sludge from urban sewage; and port installations for storage and treatment of ballast and bilge washing water, containing oil and other chemical substances, as well as small-scale equipment to minimise the effects of accidental discharges thereof.¹¹⁶ ENVIREG grants assistance for a broad range of actions addressing relevant needs in ways that are determined as most appropriate and efficient by the local communities. That does not necessarily mean building plants in every case; for example, it may finance the establishment of maintenance crews assigned in a given region to help operators of small stations improve their expertise.¹¹⁷ It must be noted in this respect that although priority is given to joint projects undertaken by more than one local authority, ENVIREG is an exclusively EC and strictly coastal scheme; accordingly, where local authorities located outside coastal areas participate in such a project, only the part relating to the needs of coastal areas is eligible for aid.¹¹⁸

Criteria on which the Commission decides on the specific allocations include the seriousness of the problem and the quality of the programmes submitted. The former is assessed by taking account of the resident population, of the importance of tourism in a given area, and of the scale of industries producing toxic and dangerous waste. The main parameters for assessing the quality of the programmes are the organisation of services for selecting, setting up and running new installations and overhauling existing facilities; the existence of an overall plan for reducing coastal pollution into which ENVIREG is properly integrated; the state of progress in implementing Community policies for the environment in various sectors, for example, an indication of how the operational programmes reflect national toxic waste plans; and the additionality of financial resources available to ENVIREG programmes compared to those already foreseen in the Community support frameworks for the environment, and other national spending in relevant areas.¹¹⁹ The European Parliament and the Economic and Social Commission had stressed that another criterion to be examined when deciding which projects are to be given priority should be respect for Community environmental legislation, but this explicit reference has -surprisingly - not found its way into the actual terms for assistance.¹²⁰

The main weakness of the programme, however, is the rather low amount of money available, which, during the first three years, was a mere ECU500 million from the Structural

¹¹⁶ *Id.*

¹¹⁷ See Durand, *op.cit.* n.100, p.150.

¹¹⁸ See EC Commission, *op.cit.* n.115, p.3.

¹¹⁹ See *ibid.*, p.4.

¹²⁰ See EP, Resolution on a regional action programme on the initiative of the Commission concerning the environment (ENVIREG), EP Doc.A3-46/90, 1990 *O.J.* (C 96) 345, at para.23; and ESC Opinion, 1990 *O.J.* (C 112) 10, at para.3.3, whereby "total compliance with the Community's environmental directives should be a pre-condition for eligibility for assistance under the ENVIREG programme".

Funds.¹²¹ From these, the larger part went towards building new purification stations, providing additional equipment for ensuring secondary-level processing, and putting deficient stations back to operation;¹²² the second largest to measures to collect and treat municipal solid waste, with ECU150 million for the coastal areas of France, Italy and Greece; while infrastructures for waste reception in ports, and for the collection, storage and processing of hazardous industrial waste attracted smaller amounts.

6.2.4. MEDSPA.

MEDSPA refers both to the general Community action plan for the Mediterranean and to the specific financial instrument under the said Regulation. In fact, Commission communications on the issue of a general action plan for the Mediterranean date as far back as 1984.¹²³ A preparatory phase, mainly for collection of data and study at a cost of ECU3.4 million, lasted from 1986 to 1988. Through the work carried out during this period, the particular European reverberations of environmental pollution in the Mediterranean area became clearer, and the need for specific Community action in close co-operation with other international bodies operating in the Mediterranean and covering the whole of the region, and with particular emphasis on integrating the environmental dimension in other Community policies in the region, was established.

In 1988, after a long period of gestation - which lasted another three years before a legally binding instrument was produced -, the Commission presented its medium and long-term strategy and priority measures.¹²⁴ It was envisaged that to put this plan into effect existing financial resources at the Community level should be utilised - and co-ordinated appropriately by the Commission -, namely the Structural Funds, the EIB, and other instruments such as the Integrated Mediterranean Programmes, the financial instruments set up under the co-operation agreements with non-Community Mediterranean countries etc.¹²⁵

Additional *ad hoc* resources were designed to complement the above, directed towards management and cost of operations fitting into planned measures but ineligible for support from existing instruments. This aid from own resources would be channelled, according to the initial planning, principally to stimulation and public awareness campaigns, and provision of technical assistance and expertise in the preparation of plans and operational programmes at national and local

¹²¹ See EP, *op.cit.* n.120, at paras.4 and 38-40

¹²² See Durand, *op.cit.* n.100, pp.150-1.

¹²³ See EC Commission, Communication to the Council on the protection of the environment in the Mediterranean basin, COM(84) 206 final, 24 April 1984. This comprised an elaborate Commission proposal on a comprehensive strategy and plan of action for the protection of the Mediterranean environment which nevertheless was not vested with a binding legal form.

¹²⁴ See EC Commission, Communication to the Council, the EP and the ESC on the protection of the environment in the Mediterranean basin, COM(88) 392 final, 21 November 1988; and Art.4 and Annex of Regulation 563/91.

¹²⁵ See *ibid.*, at para.4.4.

level.¹²⁶ The Commission intended to spread resources for the first three years of the scheme as follows: 85% to finance substantive measures, 10% to provide technical assistance, and 5% to collect the information required to implement the scheme and to improve dissemination of information within the Community and between the EU and non-member states.¹²⁷

According to the main action plan (1989-1998), priority measures for the first five years were decided on the basis of the specifically Mediterranean nature of the relevant problem and the degree of urgency, and followed these laid down in the MAP Genoa Declaration, i.e. improved water availability, through recycling, exploitation of new sources, prevention of wastage etc.; and improved water quality, through treatment of raw water; installation of sewerage systems; treatment of ballast waters from ships; as well as sound management of solid, toxic, and other dangerous wastes; biotope management; soil and coastal erosion; and desertification and forest fires programmes.¹²⁸ Priorities outside the Community were helping with the establishment of environmental administrative structures; and technical assistance regarding environmental policies and action programmes.

Regulation 563/91 established a legally binding MEDSPA, i.e. a programme of action for the protection of the environment in the Mediterranean region. This ten-year scheme importantly applies to the whole of the region, non-Community areas included, and to the whole of the Iberian Peninsula (Art.1(2)), and covers projects that are primarily directed to environmental protection (Art.5(2)).

MEDSPA was explicitly committed to the mutually agreed targets set under the auspices of MAP. These are set out as follows (Art.2):

- To intensify efforts to protect and improve the quality of the environment and increase the effectiveness of Community environmental policy and measures in the region concerned;
- To help make the environmental dimension a more integral part of action taken by the Community pursuant to other Community policies;
- To increase co-operation and co-ordination on protection of the environment in the region concerned by integrating Community action and the operations carried out at the regional, national and international level;
- To encourage the transfer of the appropriate technologies to protect the Mediterranean environment.

¹²⁶ But eventually the MEDSPA, as laid down in the relevant Regulation, is more directed to actual infrastructure, see *infra*.

¹²⁷ See EC Commission, Communication on the proposal for a MEDSPA Regulation, COM(89) 598 final; 1990 *O.J.* (C 80) 9, at p.15.

¹²⁸ Cf. EP proposal to include a number of additional priorities in EP Opinion, 1991 *O.J.* (C 19) 611. For instance, the Parliament considered that special importance should be given to "the improvement of the quality of rivers flowing into the Mediterranean" (Amend. No43), and, significantly, to "monitoring the implementation of international conventions and standards concerning large-scale industrial installations in order to encourage the transfer of appropriate technologies for the protection of the Mediterranean environment" (Amend.No.49).

Non-Community countries were to be given assistance in technical matters and in establishing environmental administrative structures, whereas EU countries needed to propose much more concrete projects, and did not qualify for funding if they had already received aid from the Structural Funds or other Community financial instruments, notably ENVIREG (Art.5(2)). Hence, the 'environmental' MEDSPA came as a complement to the 'developmental' ENVIREG.

The Commission, assisted by a management committee composed of representatives of the Member States (Art.11),¹²⁹ decided on particular allocations. Public investments and pilot or demonstration programmes could receive 50% of their cost, private investments for non-commercial purposes 30%, whereas information campaigns and measures initiated by the Commission were entitled to 100% of their cost (Art.7).

The financial allocation for the first two years of the programme was an insignificant ECU25 million (Art.3(3)). This support took the form of capital grants towards investment in projects other than infrastructure projects; financial contributions toward pilot or demonstration schemes, measures to provide the information necessary for MEDSPA action or technical assistance; interest rebates for infrastructure projects; and repayable advances (Art.6(2)).¹³⁰

The Regulation also laid down procedures for the verification and monitoring of relevant actions. These include on-the-spot checks by Commission officials on operations financed under MEDSPA (Art.8(2)), reduction or suspension of payments in case irregularities or significant changes "affecting the nature or conditions" of the project and not approved by the Commission were certified (Art.9(1)), and reporting duties of the beneficiary during and after execution of the project (Art.10). The EP sought unsuccessfully to insert Article 12(3a) reading: "Any Member State may request an investigation into the compatibility of actions or non-compliance of third countries with international conventions and standards and the impact thereof on the Mediterranean environment".¹³¹ It also tried and failed to establish closer and even formal co-operation between MEDSPA and the MAP, in particular in the research and technology sector.¹³²

Although the actual amount of funding provided is strikingly small, the value of MEDSPA rather lied in "the explication of an overall environmental policy for the Mediterranean basin and its integration into other policy concerns", which "should work as a catalyst for the use of existing

¹²⁹ Cf. EP proposal to the effect that this committee is composed by independent experts, *ibid*, pp. 613 at Amendment No8, and 618 at Amendment No29.

¹³⁰ The EP also tried to insert a provision for financial contribution for projects concerning the transfer and/or adaptation of technologies to the Mediterranean countries, especially those which are less developed, with no success, see *ibid*, p.616 at Amendment No.20. By the end of 1992, MEDSPA had provided resources for eight waste water projects in the four Community countries with a Mediterranean coastline, and four technical assistance programmes in third countries of the region, see EC Commission, Communication in relation to Council Regulation (EEC) No 563/91 of 4 March 1991 on action by the Community for the protection of the environment in the Mediterranean region (Medspa), 1993 O.J. (C 48) 2.

¹³¹ See Opinion of the EP, *op.cit.* n.128, p.618 at Amendment No.31.

¹³² *Ibid*, p.613, at Amendment No59.

resources in a manner which is compatible with this policy".¹³³ However, this scheme was terminated in 1993 and replaced by the LIFE instrument.

6.2.5. LIFE.

LIFE is the most modern Financial Instrument for the Environment, established in 1992 to assist in the development and implementation of Community environmental policy and legislation.¹³⁴ It is designed as an all-encompassing Environment Fund that provides the resources necessary to achieve the environmental objectives of the Community, and especially the integration of the environment into other policies and to sustainable development in the continent. It also aims at achieving cohesion between Community countries in which there are differences in terms of level of development, of the nature and perception of environmental problems, and of the exploitation of new technologies, and, importantly, at helping the Community in the task of discharging its international obligations.¹³⁵

The LIFE instrument was introduced in order to bring together and consolidate the non-structural programmes specific to the environment designed to provide assistance for concrete measures and field projects which had been adopted at different stages since 1984, aiming for both rationalisation and greater consistency with the development of environmental policy; accordingly, earlier environmental financial instruments applying to different Community regions, and notably MEDSPA, are hereby repealed, with a view at integrating them into a single fund with a single management structure and environment committee (Art.16).¹³⁶

Already during preparatory work, it was understood that LIFE would cover only preliminary and demonstration measures, as opposed to structural environmental projects that fall under the remit of the Structural and Cohesion Funds. More specifically, it aims to work towards alleviating the shortcomings in the administrative structures at the national or local level and the lack of direct experience in responding to environmental problems, which are viewed as major factors contributing to poor implementation of environmental legislation. In fact, this is the only financial instrument that explicitly addresses this issue, and thus constitutes a turning point in the Community's approach to environmental funding. Relevant measures include technical assistance to define coherent strategies and programmes responding to existing environmental problems; training of environmental managers, advisers for public authorities, environmental officers in firms

¹³³ Somsen, *op.cit.* n.114, p.236.

¹³⁴ Council Regulation 1973/92 establishing a Financial Instrument for the Environment (LIFE). On the preparatory work, see Wilkinson, *op.cit.* n.70, pp.121-2. The programme has been renewed by Regulations 1404/96 and 1655/2000.

¹³⁵ See EC Commission, Proposal for a Council Regulation Establishing a Financial Instrument for the Environment (LIFE), COM(91) 28 final, 31 January 1991, p.3.

¹³⁶ But see Opinion of the ESC which brings attention to the fact that "in the formulation and implementation of environmental policy in general, terrestrial concerns, tend to dominate over those of the marine", and urges the Commission to ensure that marine protection is accorded due priority in the allocations, 1991 *O.J.* (C 191) 4, at para.2.4.2.

etc.; and development, installation and modernisation of monitoring.¹³⁷

Moreover, it seeks to help involve local authorities and firms in pollution control, and thus promote more rapid progress in the field, going even beyond what is strictly required by legislation; to help the victims of environmental accidents take emergency measures or even assert their rights vis-à-vis those responsible in implementation of the 'polluter pays' principle; to give support to the adjustment efforts of small agricultural and industrial enterprises; and to promote indirect action, e.g. 'eco-labelling'.¹³⁸ Examples of possible action include promoting the use of clean technologies in various sectors, restoring contaminated sites, developing waste recycling and reuse techniques, promoting environmental auditing etc.¹³⁹

Apart from aiming at safeguarding the biological heritage and mitigating the adverse effects of global climate change and desertification, LIFE seeks to encourage national and local authorities to search for solutions to environmental problems associated with the decline of agriculture and the economic marginalisation of certain regions, as well as the revitalisation of urban areas.¹⁴⁰ Possible action in this respect includes, among others, safeguarding coastal areas and waters.

Lastly, the programme aspires to contribute to the search for solutions to global problems, and notably marine pollution, with particular attention to areas such as the Mediterranean and the Baltic.¹⁴¹ Here, possible measures extend beyond the Community territory, and may relate to Community contributions to multilateral financial mechanisms dealing with global issues, Community contribution towards implementation of international conventions, and programmes of technical assistance to non-Member countries.¹⁴²

Activities explicitly eligible for funding under the first phase of LIFE (1992-1995) were priority environmental actions in the Community, with special emphasis on nature conservation projects; technical assistance actions with third countries from the Mediterranean and Baltic regions; and in exceptional cases, actions concerning regional or global environmental problems provided for in international agreements (Art.1). It, thus, becomes apparent that this programme is primarily devoted to projects of benefit to the Community as a whole and bordering regions, mainly targeting transfrontier environmental problems. That is a notable regression towards a more stringent application of 'subsidiarity', when compared to MEDSPA, which is moreover, as already noted, coupled with a lack of particular emphasis on marine pollution. The sum available for the period

¹³⁷ See EC Commission, *op.cit.* n.135, p.11.

¹³⁸ *Ibid*, pp.11-2.

¹³⁹ But note that the ESC had recommended that the Fund be allowed to finance infrastructure which actually reduces pollution, as opposed to being confined to the support of demonstration projects or technologies, see ESC, *op.cit.* n.136, at para.2.3.3.

¹⁴⁰ See EC Commission, *op.cit.* n.135, p.12.

¹⁴¹ See *ibid*, pp.12-3.

¹⁴² Note that the EP considers that a separate financial instrument is needed to assist third countries and to contribute to the implementation of international conventions, see EP, *op.cit.* n.110, at Amend.No.5.

1992-1995 was ECU400 million (Art.7(2)), of which 20% went for nature protection projects, and 5% for projects outside the Community in the form of co-financing or interest rebates (Art.4); by 1993, ECU1.4 million were given to finance projects in the Mediterranean region.¹⁴³

It is remarkable that only a 10-20% of the applications received in 1994 were approved, which points to an incomplete understanding of the purpose and requirements of the LIFE programme, in view of the fact that it is the only one open to any private or corporate person, without restriction.¹⁴⁴ It is characteristic of the great need for development of waste disposal techniques that the relevant sector covers around one fifth of the projects funded by LIFE.¹⁴⁵ In this context, one of the most important positive aspects of this programme is that unlike the earlier financial instruments, including MEDSPA, LIFE takes a more holistic and preventative approach for each sector, such as the development of new technologies and cleaner production processes.

The experience gained during the first years of the programme's operation raised certain issues that needed to be addressed. It was noted, for instance, that the wide spectrum of activities covered tended to reduce the impact of the measures taken and, significantly "required an administrative effort out of all proportions to the benefits obtained".¹⁴⁶ In view of the fact that there are increased Community funds for the environment under other instruments, the rather modest financial means of LIFE created a need for clearer priorities and definition of selection criteria and monitoring procedures so as to redirect this programme to areas of activity "which give real added value to Community action", and increase its efficiency and transparency.¹⁴⁷

In this vein, in 1995 the Commission proposed a LIFE II Regulation,¹⁴⁸ which aimed at extending the field of application of LIFE to the Central and Eastern European countries, and refocusing at four main areas, namely implementation of the Natura 2000 European network, which relates to outstanding habitats of Community interest; implementation of Community policy, in areas other than protection of nature, through the financing of preparatory, demonstration, technical assistance, support and promotion projects aiming at providing the investment needed to implement environmental legislation - with priority to be given to coastal areas, waste and water management -, at helping local authorities incorporate environmental factors in regional planning, and at promoting sustainable development and integration of the environment in industrial activities - such as clean technologies, environmental audits and eco-labels -; assistance to Mediterranean and Baltic third countries to set up environmental infrastructures, to establish policies and action programmes

¹⁴³ UNEP, *op.cit.* n.19, p.12.

¹⁴⁴ See EC Commission, *op.cit.* n.55, p.15.

¹⁴⁵ See *ibid.* p.15 and Annex 1, Table 7.

¹⁴⁶ See EC Commission, Proposal for a Council Regulation (EC) Amending Council Regulation (EEC) No 1973/92 Establishing a Financial Instrument for the Environment (Life), COM(95) 135 final, pp.4 and 24-7.

¹⁴⁷ *Id.*

¹⁴⁸ See *ibid.*

and take measures towards sustainable development; and, lastly, promotion of know-how and experience gained.¹⁴⁹

The resulting instrument, i.e. Regulation 1404/96, accordingly provided that ECU450 million were to be dedicated during the period 1996-1999. It was furthermore laid down that the above actions "shall comply with the provisions of the Treaty and Community legislation" and had to meet certain criteria (Art.9a). The general criteria for actions in the EC require that these be of particular Community interest, making a significant contribution to the implementation of Community environmental policy and legislation; that they be carried out by technically and financially sound participants; that they be feasible in terms of the technical proposals, management and value for money; and that they contribute to a multinational approach, should the latter be more effective than a national approach. Activities to be implemented in third countries should, in turn, present an interest for the Community, notably with regard to implementing regional and international guidelines and agreements; contribute to the sustainable development on the international, regional and national level; provide solutions to environmental problems that are widespread in the region and the relevant sector; increase co-operation on cross-border, transnational or regional level; ensure feasibility; and be carried out by technically and financially sound participants.

Despite modest sums allocated for third countries, there have been some significant projects in the Southern and Eastern Mediterranean that have received LIFE II support, such as the organisation of urban waste management in Albanian municipalities, an inventory of soil resources in the West Bank and Gaza Strip, coastal management in Turkey, and the development of oil spill response capabilities in the Eastern sub-region.

LIFE III (2000-2004) earmarks EUR 640 million allocated as follows (Art.8): Nature (wildlife, habitats, Natura 2000 (Art.3)) 54%; Environment (development of innovative and integrated techniques and methods that work towards environmental protection and sustainable development and further development of Community environmental policy (Art.4)) 54%; and third countries (establishment of capacities and administrative structures in the environmental sector and development of environmental policy and action programmes in third countries (Art.5)) 6%.

With regard to LIFE -Environment, projects eligible are still demonstration and preparatory projects, and accompanying measures (Art.4(2)) not receiving aid under the Structural Funds or other Community budget instruments (Art.7). LIFE contributes up to 30% of the cost of actions involving the financing of income-generating investments; 100% of the cost of accompanying measures designed to provide and disseminate information on the exchange of experience between projects, and evaluate, monitor and promote the actions taken under the programme; and 50% of the

¹⁴⁹ See *ibid.*, pp.6-7.

cost of other activities (Art.4(3)). As far as LIFE - Third countries is concerned eligible projects include technical assistance actions that contribute to the objectives of the programme funded at 70%; and accompanying measures funded at 100% (Art.5(2) and (3)).

Proposals for projects to be financed are submitted to the Commission by Member States, or the relevant national authorities of third countries (Art.4(5) and 5(4)). An innovative possibility that LIFE II offered that the Commission may ask any persons - legal or natural - established in the Community to submit applications for assistance in respect of measures of particular interest, by means of a notice published in the Official Journal is carried forward in LIFE III (Art.4(8) and 5(9)). In this way, the Commission itself becomes a substantive actor, competent to interfere and fill the gaps that state action creates, while at the same time being the traditional administrator of funds.

The Commission supervises implementation of the projects supported under LIFE, under terms similar to those of MEDSPA,¹⁵⁰ and is assisted, as in the latter scheme, by a committee from representatives of the Member States (Arts.9-11).¹⁵¹ It is noteworthy that both the ESC and the EP recommended that the EEA be given a central role in assessing progress in the achievement of LIFE's objectives, and that the periodic State of the European Environment report play an important part in this regard.¹⁵²

6.2.6. Environmental Funding from the European Investment Bank (EIB).

The European Investment Bank supports the Community's objectives and policies by granting medium- and long-term loans to the public and private sector, primarily in Member States and secondarily in third countries. As has been already noted, the EIB also provides funds and expertise in the context of the Structural Funds and other Community financial instruments.

Notwithstanding the fact that the main priority of the Bank has always been regional development, environmental protection is increasingly given centre stage in its activities. Thus, EIB funding of environmental investments has gradually increased during the 90s, from ECU1,728 million in 1989 to ECU6,044 million in 1995.¹⁵³ In all, lending for environmental protection projects from 1991 to 1995 amounted to an impressive ECU22 billion. Although investment in various areas may also contribute to environmental protection - if one takes into account the requirement that the Bank's appraisal of all projects submitted to it has to ensure that they have no detrimental impact to the environment -, investments in areas directly concerning mitigation of water

¹⁵⁰ See *supra*, p.256-8.

¹⁵¹ But see the relevant Opinion of the ESC pointing out that the commitment to conceive and implement the operations financed in close consultation with national and local authorities and the economic and social partners concerned, as enshrined in Art.7, is not reflected operationally in the relevant Articles, and recommends the organisation of appropriate partnerships at national level, *op.cit.* n.136, at para.2.5.3. The EP took this further by inserting an amendment defining the composition and mandate of such partnership committees in Member States, which was, nevertheless, not incorporated in the Regulation, see EP Opinion, *op.cit.* n.110, at Amend.Nos.46 and 27.

¹⁵² See ESC, *op.cit.* n.136, at para.2.7.2; and EP, *op.cit.* n.110, at Amend.No.40.

¹⁵³ See EIB, *Annual Report* 1990, p.28; *Annual Report*, 1995, p.28.

pollution, i.e. wastewater collection and treatment schemes and projects to improve the quality of drinking or bathing water each year account for a little less than half of the Bank's environmental investment (ECU9 billion from 1991 to 1995). The projects in question mostly form part of major regional programmes in several river basins and coastal areas, mainly in the Mediterranean and the Baltic.

In addition, the Bank is assisting an increasing number of smaller schemes carried out by local authorities and financed from global loans; for example, in 1995, it funded the construction of around 1500 sewerage systems and wastewater treatment plants at local level.¹⁵⁴ The EIB has also financed installations that combine domestic/industrial waste incineration with district heating in some twenty European towns and cities, while large sums have been lent for environmental protection equipment at industrial sites, for installations to reduce pollutant emissions from refineries and for desulphurisation filters at major coal or lignite-fired power stations.¹⁵⁵

On the other hand, non-EC Mediterranean countries had in the past received only modest loans for environmental protection measures under the Financial Protocols,¹⁵⁶ concluded within the broader bilateral co-operation agreements.¹⁵⁷ However, from 1992 onwards, funding has been supplemented by non-protocol horizontal financial co-operation, in the form of loans from EIB and from the Community's own budget, under the Community's New Mediterranean Policy (1992-1996) that will be examined in greater detail below.¹⁵⁸ Thus, during the period 1991-1995, the EIB has lent an aggregate amount close to ECU800 million for environmental protection projects in the Mediterranean Basin, most of them involving wastewater and sewerage treatment and thus addressing one of the main land-based sources of pollution in the region.

Until that time EIB apportionment of funds in the region as a whole was characteristically unbalanced: Third states have received a small fraction of the money available, while there are considerable discrepancies among Member States as well. Hence, Italy had made the most extended use of EIB funding, while Spain joined in with substantial impetus since it acceded to the Community. France had not often turned to the Bank in order to acquire funds for its wastewater

¹⁵⁴ Among major Mediterranean urban centres having benefited from this policy in order to acquire effluent treatment facilities are Valencia, Rome, Venice, Florence, Milan, Athens, Heraklion, and Marseilles.

¹⁵⁵ See EIB, *The Environment: A Central Concern*, <http://www.eib.org/obj/env.htm>

¹⁵⁶ See EIB, *Financing Facilities under the Mediterranean Agreements*, 1987, pp.6-8.

¹⁵⁷ See *infra*, pp.273-4.

¹⁵⁸ The total allocation for 1992 to 1996 comprises grants totalling around ECU500 million, half of which fall under the protocols, and half are outside the protocols, plus EIB loans worth a total of ECU610 million, see EC Commission, *op.cit.* n.55, Annex II, p.14. In this connection, the EIB has an allocation of ECU500 million directed solely to environmental measures, see EC Commission, *Strengthening the Mediterranean Policy of the European Union: Establishing a Euro-Mediterranean Partnership*, COM(94) 427 final, 19 October 1994, p.25. Note also that the EU undertook during the same period wider initiatives on Euro-Mediterranean Co-operation, which led to the 'Nicosia Charter' (1990), a 'blueprint' for sustainable development in the region; and a Ministerial Meeting in Cairo in 1992, which adopted a Declaration on practical action; established a follow-up mechanism composed of the EU, the World Bank, MAP and UNDP in charge of the co-ordination of activities; and identified four Mediterranean countries, namely Albania, Egypt, Tunisia and Malta, on which specific projects would be implemented during an initial period of two years.

treatment projects; a reason for that might be the French management system, which is able to generate its own resources, whereas Greece seemed to be lagging behind in taking advantage of the EIB's funding potential.

More recent data, however, show a tendency for increased symmetry. Thus, in 1996, the EIB disbursed ECU5.9 billion for environmental protection projects within the EU improving the quality of life and focussing on water conservation and management, air pollution and the urban environment.¹⁵⁹ During that year, EIB loans supporting sustainable economic development and trans-regional projects in non-member Mediterranean countries totalled ECU681 million;¹⁶⁰ while the amount for 1997 to 1999 was 2.310 million.

Let us now take a closer look at the Community Mediterranean policies in the 90s, an area where promising developments are envisaged to take place in the future and where EIB is bound to play a central role.

6.2.7. The New Mediterranean Policy and the 'Euro-Mediterranean Partnership'.

A radical review of the Community Mediterranean policy - which has passed through various stages since it was initiated in 1972 -¹⁶¹ began in 1990 and continued during 1991 when the majority of the new financial protocols with Mediterranean countries entered into force.¹⁶² This re-direction heralded a new stage of co-operation spanning from 1992 to 1996 and governed by Regulation 1763/92.¹⁶³ This instrument sought to ensure a balanced apportionment of the ECU230 million earmarked to the various regions and countries concerned for projects supplementing those financed under the financial protocols with third Mediterranean countries (Art.1). The types of measures concerning environmental protection,¹⁶⁴ as envisaged by the Regulation, comprised the financing of 3% interest-rate subsidies on loans granted by the Bank for investment purposes, outside the framework of the financial protocols, which would have a catalytic effect, such as pilot or demonstration projects - including those relating to the protection of the waters of the

¹⁵⁹ See EIB, Press Release SP 03/97, 6 February 1997.

¹⁶⁰ Of which ECU562 million was made available outside the separate national financial protocol arrangements. One of the most significant projects finalised in 1996 involves a loan of ECU30 million towards works to modify the production process in a petrochemical plant at Skikda in North-Eastern Algeria, so as to eliminate a major source of pollution in the Mediterranean. The project is being carried out in line with the recommendations of a METAP study financed by the EIB and dealing with ways of reducing pollution at ports and along the coastline of Algeria. The new process to be introduced for manufacturing chlorine will eliminate all mercury contamination, a major source of pollution in the port of Skikda, see EIB, Press Release EXT 37/96, 20 November 1996.

¹⁶¹ See, among others, A.Tovias, 'The EU's Mediterranean Policies under Pressure', in R.Gillespie (ed.), *Mediterranean Politics*, Vol.2, 1996, pp.9-25.

¹⁶² See EC, *European Community and The Mediterranean*, 1991, esp. at p.6.

¹⁶³ Council Regulation 1763/92 concerning financial co-operation in respect of all Mediterranean non-Member countries. See also Council Regulation 1762/92 on the implementation of the protocols on financial and technical co-operation concluded by the Community with Mediterranean non-member countries.

¹⁶⁴ Such measures were allocated, according to an indicative breakdown laid down in the Annex to the Regulation, ECU115-120 million

Mediterranean -, and training measures (Art.3(3)). However, this re-orientation did not address all problems identified in the different phases of the Community's Mediterranean policy. In fact, results thereof are generally thought to be mixed: Financial and technical support for structural adjustment has not had any major overall impact, while the respective instruments are thought to have been rather narrow, and the resources provided inadequate to meet the increasing needs of the region.¹⁶⁵

As far as environmental objectives are concerned, recent agreements of financial and technical co-operation with Mediterranean countries tend to devote more attention to relevant considerations; the most wide-spread clause to this effect stipulates that environmental projects, in particular training and technical assistance ones, are a priority area of Community funding.¹⁶⁶ Still, in the more general and weighty sector of economic reforms and restructuring, agriculture and industry, there has been a conspicuous lack of environmental considerations.¹⁶⁷ What is more, even when the Community was expected to fund environmental projects in the developing states of the region, there were no conditions attached that would commit the latter to comply with international standards, let alone EU rules on environmental protection.¹⁶⁸

Having said that, since 1994, the European Union has been discussing a new more wholesome approach towards its southern neighbours, which has been characteristically termed "Euro-Mediterranean Partnership".¹⁶⁹ This notion is premised on the many areas of interdependence between Europe and the Mediterranean region, notably environment, energy, migration, trade and investment, and on an appreciation of the fact that helping Mediterranean countries meet the challenges they face is vital for Community interests. These challenges mainly relate to peace and stability in the region, as well as free trade and economic modernisation and restructuring. The Community's long-term aspiration regarding such a close and extended co-operation is to establish "the largest free trade area in the world, covering the enlarged Community, any Central and Eastern

¹⁶⁵ See EC Commission, *op.cit.* n.158, pp.20-3. In this context note that the 'Avicenne initiative' (on science and technology co-operation with the Maghreb and the countries of the Mediterranean Basin), despite the wide range of actions it covered, had a total budget of ECU15.6 million for 1992-1994, see EC Commission, *op.cit.* n.55, Annex II, p.15.

¹⁶⁶ See, e.g., Council Regulation 1763/92, at Arts.1 and 3(1); 1991 Protocol on financial and technical co-operation between the European Community and the Syrian Arab Republic; and identical wording in the 1991 Protocol with Morocco; and in the 1991 Protocol with Tunisia. See also 1993 Protocol on financial co-operation between the EC and Slovenia, Article 9; 1990 Agreement between the European Economic Community and the People's Republic of Bulgaria on trade and commercial and Economic Co-operation, Article 2; and 1980 Agreement with Yugoslavia, Article 10. Surprisingly, no such stipulation appears in the 1989 Protocol with Malta.

¹⁶⁷ *Id.*

¹⁶⁸ Cf. the 1992 Agreement on the European Economic Area with the European Free Trade Area (EFTA) countries, purporting to 'export' a considerable body of Community environmental principles and legislation to non-member states and integrate the environmental dimension in a trade regime; in fact, if EFTA countries are to abide by the terms of this agreement, no less than thirty two environmental Directives will have to become part of their domestic law. For a brief discussion of the environmental provisions of this instrument, see D.Baldock & E.Keene, 'Incorporating Environmental Considerations in Common Market Arrangements', 23 *Env'l L.*, 1993, pp.601-2; and Sands, *op.cit.* n.11, pp.549-50.

¹⁶⁹ See Commission Communications: EC Commission, *op.cit.* n.158; and Strengthening the Mediterranean Policy of the European Union: Proposals for Implementing a Euro-Mediterranean Partnership, COM(95) 72 final, 8 March 1995. See also the most favourable opinion of the ESC, Opinion on the Euro-Mediterranean Partnership, 1995 *O.J.* (C 301) 45.

European countries not by then Members, and all Mediterranean non-Member countries" by 2010.¹⁷⁰

For this aspiration to be achieved, there is a need for a multi-dimensional policy, a long-term strategy, seeking to establish a Euro-Mediterranean Zone of Political Stability and Security; and a legally framed Euro-Mediterranean Economic Area involving promotion of free trade, increased financial assistance, and wider co-operation. This strategy was solemnly adopted by the Foreign Ministers of all states bordering the Mediterranean (i.e. except Libya, Albania and Yugoslavia), at the 1995 Barcelona Conference, and it is envisaged that there will be a series of 'Euro-Mediterranean Association Agreements' concluded with all partners.¹⁷¹

Environmental protection is one of the priority areas of co-operation; more specifically, the Community intended to promote a short- and medium term priority action programme, and provide financial support focussed on these priorities, especially in the form of long-term subsidised EIB loans.¹⁷² Significantly, in this context the EU intended to promote the adoption of uniform legislation, at least for some environmental sectors, increase its contribution in the areas of training, education, networking and environmental data, and, last but not least, enhance co-operation within existing international structures, such as MAP.¹⁷³

A Short and Medium-term Priority Environmental Action Programme (SMAP), designed to provide the common framework that will guide both policy and funding for environmental purposes within the 'Euro-Mediterranean partnership' context, was indeed adopted by the Euro-Mediterranean Ministerial Conference on the Environment (Helsinki, November 1997).¹⁷⁴ Pursuant to it, five priority fields require immediate attention: integrated water management, integrated waste management, 'hot spots' (concerning both polluted areas and threatened ecosystems), integrated coastal zone management, and combatting desertification. The SMAP also provides for a follow-up mechanism consisting of an network of correspondents; a reporting system; a review mechanism after two years; and consultation practices, also involving the civil society. Furthermore, it explicitly acknowledges that, among a series of supportive measures that are necessary to achieve the objective of enhanced environmental protection in the region, support for the implementation of obligations contained in applicable international instruments, as well as adoption and implementation of legislation and regulatory measures, especially preventive ones, is of particular importance. In the framework of SMAP, the partners discuss and evaluate regional environmental projects and present them for funding under the MEDA Regulation.

¹⁷⁰ See EC Commission, *op.cit.* n.158 pp.2-3.

¹⁷¹ To date such agreements have been concluded between the Community and Tunisia, see Council Decision 98/238, 1998 *O.J.* (L 97) 1; Morocco, Council Decision 00/204, 2000 *O.J.* (L 70) 1; Israel, see EUROMED Special Feature, No.15, 18 July 2000, at www.euromed.net.

¹⁷² Note that the Economic and Social Committee emphasises that special attention should be given to the development of new and efficient water treatment policies, see ESC, *op.cit.* n.169, Appendix II, at (b).

¹⁷³ See EC Commission, *op.cit.* n.169, p.11.

¹⁷⁴ On SMAP, see the EU website at <http://europa.eu.int/comm/dg11/smap>.

More generally, Council Regulation 1488/96 on financial and technical measures to accompany the reform of economic and social structures in the framework of the Euro-Mediterranean partnership (MEDA Regulation) is the instrument governing this ambitious new stage.¹⁷⁵ According to the MEDA Regulation, the Community shall implement measures in the framework of the principles and priorities of the Euro-Mediterranean partnership to support the efforts that Mediterranean non-Member countries will undertake to reform their economic and social structures and mitigate any social or environmental consequences which may result from economic development (Art.1(1)).¹⁷⁶

Importantly, the beneficiaries of such measures may include not only states and regions but also local authorities, regional organizations, public agencies, local or traditional communities, organisations supporting business, private operators, co-operatives, mutual societies, associations, foundations and non-governmental organisations (Art.1(2)). Activities financed shall mainly take the form of technical assistance, training, institution-building, information, seminars, studies, projects for investment in micro-enterprises, small and medium-sized undertakings and infrastructures and action designed to highlight the Community nature of the assistance (Annex II(vi)). Measures to be financed under this Regulation shall be selected taking account, *inter alia*, of the beneficiaries' priorities, evolving needs, absorption capacity and progress towards structural reform. Selection shall also be based on an assessment of the effectiveness of those measures in achieving the objectives aimed at by Community support (Art.5(1)). Indicative programmes covering three-year periods shall be established at national and regional level (Art.5(2)), and shall be updated annually and amended, as necessary. These have to define the main objectives, guidelines, and priority sectors of Community support, together with factors for the evaluation of the programmes. In this context, due regard shall be taken of environmental considerations in the preparation and implementation of all activities financed (Annex II(vii)).

It is equally important that the Commission has included in its proposed guidelines for MEDA programmes an explicit reference to assistance to be given as a matter of priority in the field of "harmonization of legislation and standards in the field of the environment", so that Mediterranean countries can prepare for free trade with the EU and raise their standard of living.¹⁷⁷ This is actually the first sign of a trend towards harmonisation of environmental standards throughout the region outside the Barcelona Convention system. But even before this objective is

¹⁷⁵ It replaces Regulations 1762/92 and 1763/92 as from 1 January 1997, the former remaining in force for the management of financial protocols still applicable at that date and for the commitment of funds remaining under the expired protocols (Art.17).

¹⁷⁶ Note, however, that not all third Mediterranean countries are to benefit from the new arrangements. According to Annex I of the Regulation, Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Syria, Tunisia, Turkey, Occupied Territories of Gaza and the West Bank are elevated to the rank of 'Mediterranean partner' for the EU. That leaves outside the old 'pariahs', Libya and all Balkan countries.

¹⁷⁷ See EC Commission, Proposal for a Council decision concerning the adoption of the guidelines for MEDA indicative programmes, COM(96) 441 final, 12.09.1996, p.8.

actually reached, the Community may impose appropriate conditions on the projects it is going to fund, with the understanding that should these be disregarded further funding would be suspended or terminated.

Community financing shall notably be in the form of grants or risk capital. Concerning co-operation measures in the field of the environment it may also take the form of interest rate subsidies, at a rate of 3%, for loans granted by the Bank from its own resources (Art.6.(1)).¹⁷⁸ Financing decisions and any financing agreements and contracts resulting therefrom shall provide, inter alia, for supervision and financial control by the Commission and audits by the Court of Auditors, where appropriate, to be carried out on the spot (Art.6(3)). The amount dedicated to implementing this programme for the period 1995 to 1999 is set at ECU3.424 billion (Art.1(3)).¹⁷⁹

The Commission shall be assisted in formulating relevant proposals by the MED Committee composed of representatives of the Member States (Art.11(1)). Should there be a divergence of opinion between the MED Committee and the Commission, proposals are referred to the Council for final decision (Art.11(3)). Regarding projects to be financed by subsidised loans in the field of the environment, the EIB may act on any proposal only after it receives Commission approval (Art.12). The Commission is further instructed to examine, together with the Bank, progress achieved in implementing the MEDA Regulation and has to submit to the European Parliament and the Council an annual report containing information on the measures financed during the year, albeit with due regard for confidentiality, and provide an assessment of the results obtained (Art.15(1)). The Commission has in fact proceeded with this evaluation and has come up with a proposal to amend Regulation 1488/96 in order to streamline and simplify the decision-making and follow-up procedures.¹⁸⁰

All said, meeting the objectives of the 'Euro-Mediterranean partnership' may prove a more difficult task than it already is by its nature. It is characteristic of the sensitive political character of the extended co-operation streamlined by the MEDA Regulation that the Council of Foreign Ministers held on 23 April 1996 - exactly three months before its adoption - was fraught with disagreements over the relevant proposal.¹⁸¹ This last point is further illustrated by the more recent Malta Conference of Foreign Ministers of Mediterranean countries (15-16 April 1997), which

¹⁷⁸ Loans signed by the EIB in 1996 include projects to improve waste water treatment and management of water resources in Morocco, Egypt, Lebanon, and the Palestinian territories.

¹⁷⁹ Notwithstanding the Commission proposal for a sum of ECU5.5 billion, of which ECU0.3 billion for environmental projects, see EC Commission, *op.cit.* n.169, p.14. Note that 90% of the resources are channelled bilaterally, and the other 10% is devoted to regional activities in the benefit of all. Eventually, the sum increased to 3.474 billion, see EC Commission, Annual Report of the MEDA Programme 1998.

¹⁸⁰ See EC Commission, Proposal for a Council Regulation amending Regulation 1488/96..., COM(1999) 494 final, 99/0214 (CNS), 20.10.1999.

¹⁸¹ Greece, for instance, continued to oppose any financial aid to Turkey, whilst the UK was unhappy at the decision-making procedure with regard to cutting off aid in the event of human rights violations, see *European Report*, 2126/V/9, 24 April 1996.

produced very little results, mainly because of increasing tension in the Arab-Israeli relations. However, the participants took time to note that there are considerable delays in the absorption of financial allocations and that new impetus is required, if the agreed targets are to be met.¹⁸² 1997 was, nevertheless, the first year of effective implementation of the MEDA programme, when almost one billion ECUs were absorbed by the Mediterranean partners (approximately 110 million of which devoted to environmental projects), while Framework Financing Conventions were being concluded with the latter.¹⁸³

6.3. The World Bank/European Investment Bank (EIB) Environmental Program for the Mediterranean (EPM).

In the context of enhanced commitment of international banks to environmentally sound investments during the 80s and their strategic support of regional environmental actions,¹⁸⁴ the World Bank and the EIB, with the support of the UN Development Programme (UNDP) and the European Community, initiated in 1988 the Environmental Program for the Mediterranean (EPM). This is a programme of assistance seeking to address environmental policy, and institutional and investment-related needs in Mediterranean countries, and mobilise the financial resources required to implement the broad range of actions needed to rectify the environmental problems of the region.¹⁸⁵ Importantly, the EPM is not confined only to certain aspects of environmental degradation, but has the very broad scope of managing the natural resources of the basin consistently with the principles of sustainable development.

The EPM has developed in a preparatory and three implementing phases: The preparatory phase - completed by 1990 - involved a study of environmental degradation in the Mediterranean, and identification of priority areas, as well as definition of the broad instruments of intervention for mounting a responsive programme of assistance. A very significant contribution of this study is that it exposes the causes of environmental degradation in the region in rather bold terms.¹⁸⁶ It highlights three main reasons for it, setting aside population growth, namely inappropriate economic policies;¹⁸⁷ weak regulatory and administrative systems;¹⁸⁸ and insufficient public awareness.¹⁸⁹ It

¹⁸² See Conclusions of the Second Euro-Mediterranean Ministerial Conference, Malta, 15 and 16 April 1997, at <http://www.noel.diplomacy.edu/euromed>; and F.S.Hakura, 'The Euro-Mediterranean Policy: The Implications of the Barcelona Declaration', 34 *C.M.L.Rev.*, 1997, pp.337-66.

¹⁸³ See Communication by Vice-President Marin to the Commission, at <http://www.euromed.net/MEDA/REPORTS/>.

¹⁸⁴ See *supra*, Chapter 3, p.113.

¹⁸⁵ See World Bank/EIB, *The Environmental Program for the Mediterranean - Preserving a Shared Heritage and Managing a Common Resource*, 1990.

¹⁸⁶ *Ibid*, pp.35-48.

¹⁸⁷ Involving pricing distortions, such as low prices, usually by means of subsidies, for energy and for industrial inputs which encourage excessive use and do not provide incentive for enterprises to invest in resource recovery and reuse. Low output prices also reduce the incentive to recover waste, while the pricing of water below economic cost throughout the (continued...)

further found that many of the countries in question have been developing environmental programmes to address immediate priorities, but these are rarely preventive in character, due to these adverse factors. It is explicitly stated, in this context, that MAP has so far advanced understanding of the threats to the Mediterranean environment, but has not had any considerable effect on projects or on policy formulation.¹⁹⁰

The study finally stresses the suitability of economic measures, such as pricing resources so as to reflect true costs and other incentives and/or disincentives, such as pollution charges, balanced with better regulatory interventions, improved resource management, and specific environment-related investments, in order to improve the quality of the environment in the region. To assist in such an effort, the World Bank and the EIB are summoned to contribute their expertise in policy analysis and formulation; project design and preparation; institution building; and mobilisation of financial resources.¹⁹¹ The EPM was, thus, seen as an opportunity for a more systematic regional analysis through exchanges of experience among interested states and the translation of this into effective projects and policies.

Proposed action was envisaged to span three closely linked levels: A rolling three-year Mediterranean Environment Technical Assistance Program (METAP), subject to annual review of financing requirements, and launched in January 1990; increased emphasis by the two Banks on the identification and financing of environmental projects and components thereof; and initiatives to attract resources from other multilateral and bilateral donors in support of METAP and EPM investment activities. The last two levels primarily address external borrowing on concessional terms that the developing countries of the region are in need of.

Accordingly, the range of activities of the EPM, for the biennium 1990-1992, involved policy studies, institution building, and monitoring, including elaboration of oil spill contingency

¹⁸⁷(...continued)

region discourages the treatment and reuse of wastewater, leading to rapid depletion of freshwater resources

¹⁸⁸ See *infra*, Chapter 7, p.305. Importantly, inadequate management presents an impediment to improving municipal and industrial wastewater treatment. This mostly takes the form of low-tariff revenues of wastewater agencies - due mainly to political constraints - seldom covering the cost of operation and maintenance; hence, these agencies are dependent on government budgets, cannot attract qualified personnel, and sometimes facilities simply break down and are bypassed altogether.

¹⁸⁹ Hence, in much of the region, the - rather misguided - perception is that untapped resources are still available for development and that new technologies will solve the problems of resource depletion. At the same time many sectoral issues are not fully understood, and the same can be said with regard to external costs, including transboundary issues, such as air pollution and groundwater aquifers. By the same token, the long-term importance of ecologically fragile coastal areas and ecosystems is not sufficiently appreciated and consequently their continuing degradation is tolerated; this is helped by the fact that environmental education in most Mediterranean countries is still lagging behind.

¹⁹⁰ See World Bank/EIB, *op.cit.* n.185, p.16.

¹⁹¹ In fact, from 1980 to 1990, the EIB's environment-related loans in the Mediterranean had totalled almost \$3.3 billion - about half of its total environmental lending -, whereas the World Bank's loans for environmental protection in the region had amounted to around \$2.3 billion - only 8% of all its lending to Mediterranean countries. The environmental priorities of the two Banks have differed, however, with the EIB being more active in water management; at the same time, the World Bank activities mainly involve the Southern and Eastern coast, whereas the EIB, as already discussed, focusses on the Northern rim.

plans and disaster preparedness, the goal being a full operational capability in the region; support for the implementation of the Athens Protocol; compilation and assessment of the environment-related legislative, regulatory, and institutional frameworks in Mediterranean countries, especially these applicable in coastal areas; regional studies on linkages between environment and development with the Blue Plan team; development and implementation of an institution-strengthening programme, involving training, twinning of laboratories, and provision of equipment, for marine pollution monitoring in the context of MED POL; as well as project identification and preparation, including updating of feasibility studies for port reception facilities, and preparation of representative pilot projects for coastal zone management.

The second phase of the programme identified and prepared investment projects and institution-strengthening activities and defined specific policy measures based on the priority areas established during the first phase; whereas the third is due to implement these measures, projects and activities. The priorities for the second and third phases envisaged both curative and preventive measures in the areas of:

- Integrated Water Resource Management, which includes integrated, long-term planning for surface and groundwater resources adopting the least-cost solutions for their development; conservation and protection of identified water resources, through pricing and other measures, such as information, regulations, and incentives for water-saving technologies, recycling and reuse; institutional and legal changes to consolidate responsibility for water resource planning and management; improvement of responsible organisations' capabilities in data collection, monitoring, and analysis of management alternatives; and the adoption of coherent pollution reduction strategies for coastal and watershed areas, which should comprise investments in least-cost systems, provision of incentives for adoption of water-saving technologies and for conservation and reuse, and improvement in the economic and regulatory aspects of control policies; and watershed management programmes having a significant effect on water availability, e.g. soil conservation, fertiliser and pesticide management, and siting of industry and of solid waste disposal sites;
- Management of Solid and Hazardous Wastes;
- Prevention and Control of Marine Pollution from Oil and Chemicals, which includes preparation of operational oil spill contingency plans for all countries, encompassing the development of sub-regional and inter-country arrangements to maximise the efficiency of control and co-ordinate actions against spills of hazardous materials; expansion and rehabilitation of port oil reception facilities, including floating facilities; adoption of incentives for improved deballasting; monitoring and enforcement of the MARPOL and Barcelona Convention provisions on reducing marine pollution from ships and land-based sources; preparation of complementary disaster preparedness plans for shipping accidents involving hazardous materials; and training of personnel and provision of adequate equipment in case of oil or hazardous material emergencies; and

- Coastal Zone Management.

Turning now specifically to METAP, it must be made clear that this scheme is the main operational instrument of the EPM, and is designed to act as a catalyst for environmental investment. This means that the main responsibility for such investment rests with the countries themselves, which have to mobilise primarily their domestic resources. It also means that, however ambitious and comprehensive the scope of EPM as a whole might seem, it is really up to the Banks to choose which projects to fund, without any structured arrangement, but METAP, restricting them.

METAP has three basic objectives, namely to develop a sound pipeline of environmental projects; to formulate and improve environmental policies and regulations; and to strengthen the required institutional framework in the countries of the region. Technical assistance in this framework consists in: prefeasibility studies of projects to be financed in the third phase of the EPM; policy studies addressing key policy factors affecting the Mediterranean environment and making specific recommendations for implementation; and a coherent institutional development programme, including specific recommendations for improving the environmental legislative and regulatory frameworks at the country, sub-regional, and regional levels; studies on strengthening institutions and organisations; training; seminars on topics of regional interest to disseminate the findings of the policy studies and information on other METAP activities; support for increased public awareness; and activities of regional relevance aimed at strengthening scientific and regional databases.

METAP activities were due to be closely integrated with the regional activities of the two Banks, whereas collaboration with UNEP/MAP was envisaged with a view to developing actions that would contribute to the overall effectiveness of the EPM. But the principal integration envisaged involves Community activities for the protection of the Mediterranean region, and notably MEDSPA.¹⁹²

The three-year cycle of METAP I ended in 1992, and the projects then completed involved twelve Mediterranean countries, with special attention given to the Southern shore.¹⁹³ In practice, during the first cycle, capacity-building efforts were geared towards policy studies to create incentive structures promoting environmentally sustainable development and to guide institutional development by creating capacity at national and local levels for strategic environmental action planning and priority setting, since having appropriate institutions, incentives and information in place is thought to be essential for the success of critical investments in environment.¹⁹⁴

On the basis of experience gained during that period, subsequent efforts concentrated on

¹⁹² See EIB, *Annual Report 1989*, p.16.

¹⁹³ Namely, Albania, Algeria, Cyprus, Croatia, Egypt, Greece, Israel, Italy, Malta, Morocco, Tunisia, and Turkey, see *Europe Environment*, No.411, June 8, 1993, p.5.

¹⁹⁴ See A.Kudat, S.Peabody & N.Ozmen, 'METAP: A Concept Paper on Capacity Building', cited in World Bank's web site at <http://www-esd.worldbank.org/html/esd/env/publicat/bulletin/nltv7n1/news4.htm>.

supporting institutional and policy development, and integrating information and communications into the process of environmentally sustainable development. During the second cycle (METAP II), launched in 1993, METAP concentrated on sponsoring follow-up studies of incentive systems that are more broadly focussed, and have applicability in many countries of the region. The linkages between policy and investment were thus emphasised with a clearer objective to identify coastal zone investments. It was envisaged that during this phase METAP would be oriented towards practical measures, primarily in the sectors of water quality, the urban environment and the development of infrastructure - with ECU30 million earmarked for the period 1993-1995 to be exclusively used for the studies needed to prepare the projects, while funding for the actual implementation of the latter was estimated to be several times higher.¹⁹⁵

Most of the project studies financed during these three years were aimed at solid waste management, industrial pollution control, wastewater treatment and oil pollution control; among them some of important magnitude, such as the Algeria Industrial Pollution Control and Egypt's Pollution Abatement Projects. Regional capacity-building initiatives focussed on training in environmental communications, conflict mediation and negotiation and environmental economics. METAP interventions towards institutional strengthening included a MEDGEOBASE land information system in Morocco, advanced phases of environmental impact assessment units in Algeria and Egypt and an Environmental Strategy for Lebanon.¹⁹⁶

Effort was to also to be made to find additional financial backers to support the programme, notwithstanding the World Bank Vice-President's satisfaction with the stepping-up of levels of investment during METAP I. It is notable in this respect that, according to the said official, the difficulties had more to do with shortage of worthwhile projects than lack of funding.¹⁹⁷ In fact, during its first years of operation, apart from developing training programmes,¹⁹⁸ and direct organisational support in some countries of the region, METAP managed to secure financing from different sources for several activities.¹⁹⁹

The programme's third and final phase (METAP III, 1996-2000), is a \$100 million programme which will implement concrete projects in three integrated priority areas: capacity

¹⁹⁵ See *Europe Environment*, *op.cit.* n.193.

¹⁹⁶ In 1994, preparation began on the Albania Integrated Coastal Zone Management Project; on an oil spill contingency plan in the Occupied Territories; and on a solid waste management project in Turkey, see World Bank, *Making Development Sustainable - The World Bank Group and the Environment - Fiscal 1994*, 1994, p.127. In addition, during the same year the Mediterranean Coastal Cities Network (MEDCITIES), with METAP support, conducted environmental audits in several cities, i.e. Limassol (Cyprus), Oran (Algeria), Sousse (Tunisia), Tangiers (Morocco), Tripoli/El-Mina (Lebanon), and Tirana (Albania), and began follow-up action.

¹⁹⁷ *Europe Environment*, *op.cit.* n.193.

¹⁹⁸ Three main training programmes were under way in 1994 relating to environmental communication, environmental mediation and negotiation, and environmental impact assessment.

¹⁹⁹ For example GEF financing for Tunisia's programme to combat marine pollution; EU financing for the Al Hoceima Conservation Management Plan in Morocco; EIB financing for the Limassol Municipal Environmental Audit in Cyprus; and World Bank financing for the Hazardous Waste Management Options programme in Algeria, see World Bank, *op.cit.* n.196, pp.126-7.

building, participation and partnerships; arresting and prevention of pollution at 'hot spots'; and integrated water and coastal areas resource management. It is envisaged that, by shifting the programme's management to the region, through such initiatives as a METAP Regional Facility at Cairo consisting of a UNDP-managed Capacity Building Unit; a World Bank/EIB-managed Project Preparation Unit; a Private Public Partnership which will expand partnerships and collaborations between government, business, and community groups; and a Special Grants Fund for local environmental NGOs in beneficiary countries, METAP III will result in several billion dollars in environmentally related investments. In the current phase, the programme is taking a demand-driven approach, and focusses on proceeding to sustained action on a series of specific environmental investments; increasing environmental management capacity, concentrating on monitoring, enforcement and participation; and establishing and strengthening partnerships with the private sector and NGOs.

Aspiring as it may seem, the EPM as a whole is surrounded by serious scepticism. In the core of it lies - as could be expected - the World Bank's general attitude towards developmental and environmental issues.²⁰⁰ It is specifically pointed out that the policy tools promoted by the Bank, such as taxes, prices, subsidies etc., are traditional instruments and may have proved effective in industrialised, free- market economies. But in the developing Mediterranean countries, which do not conform with such a model, it is feared that, for instance, high water prices would deprive poor consumers from a basic good, and would expose local industries to overwhelming competition with transnational corporations. Moreover, the EPM's priority programme is criticised as "not [being] very concrete" and not substantially different from "a 'business as usual' policy-based lending approach with environmental impact assessment tagged on";²⁰¹ to put it differently, it is feared that the World Bank would never give precedence to environmental concerns over economic development. In this context, its power to dictate, to a certain extent, internal restructuring and to interfere with policy-making is not viewed as a necessarily beneficial reality, as its adherence to a market-based system and its drive to implement such schemes in developing countries does not help the latter develop their own capacities, but rather prolongs a dependency situation, which in turn favours exploitation and degradation of the environment.²⁰²

On the other hand, and notwithstanding the non-binding nature of EPM, even these suspicious of the World Bank's approach concede that developing countries and their companies have no incentive to introduce higher environmental standards without outside pressure, so that policy-based lending with environmental conditions attached might have a positive impact in this

²⁰⁰ See Kütting, *op.cit.* n.61, pp.240-2.

²⁰¹ *Ibid*, p.241.

²⁰² *Ibid*, p.242.

respect.²⁰³ What is most important, co-operation with MAP is deemed as very critical in giving more substance to both initiatives, and helping put in practice recommendations adopted at the Barcelona Convention Meetings of the Parties.

6.4. Global Environment Facility (GEF) Funding in the Mediterranean.

Protection of the Mediterranean marine environment from pollution falls under the 'International Waters' heading in the Global Environment Facility's agenda.²⁰⁴ Protection of international waters in the Mediterranean seems, *prima facie*, to refer to measures for abating pollution from ships, as this is the main type of pollution encountered on the high seas. However, GEF activity in the region, notwithstanding its modest start, has expanded to give new meaning to the term; thus, 'international waters' in the Mediterranean now signify 'waters of international concern' potentially covering sea areas under exclusive national jurisdiction, and consequently also addressing vital problems of land-based pollution. In this context GEF co-financed, in 1997, the preparation of a Mediterranean- wide Strategic Action Programme to address pollution from land-based activities, with the possibility of extending its support to follow-up activities envisaged therein at a sum of between \$4-6 million.²⁰⁵

Having said that, the only GEF endeavour concerning protection of the Mediterranean against pollution in full fledge today is the Oil Pollution Management Project for the Southwest Mediterranean Sea,²⁰⁶ while a much more significant plan for abating marine pollution, including that from land-based sources, in the whole of the Southern Mediterranean region is still in its early stages. The former is a pilot activity involving three developing countries, Algeria, Morocco and Tunisia, and was scheduled for completion by December 1998 at a total cost of \$20 million,²⁰⁷ an amount that the countries concerned would be unable to raise from their own national budgets. Its main objectives are:

- To reduce the input of petroleum hydrocarbons into the international waters of the region by complying with MARPOL requirements;
- To ensure commonality of approach, regulatory policies, and methodologies;
- To promote exchange of information and co-ordination of implementation;
- To utilise national data sets to assess regional trends in marine pollution, both for national

²⁰³ *Id.*

²⁰⁴ On GEF in general, see *supra*, Chapter 3, pp.119-20.

²⁰⁵ See UNEP, *op.cit.* n.38, pp.80-1.

²⁰⁶ See GEF, *Algeria, Morocco and Tunisia - Oil Pollution Management Project for the Southwest Mediterranean Sea*, Project Document, April 1994. Note, however, that the World Bank has been financing several port projects in the region, see *ibid.* p.19.

²⁰⁷ More specifically, \$18.3 million comes as concessional funding from the GET core funds, while the remaining amount is raised by individual countries, see *ibid.* p.16.

coastal waters and for adjacent international waters;

- To enhance national monitoring capabilities; and more generally
- To “improve marine pollution management through development of a common region-wide approach and mechanisms, as well as providing a future linkage to the Malta Centre of REMPEC”.²⁰⁸

Significantly, promotion of national regulations and regulatory mechanisms, as well as development of appropriate infrastructure for monitoring compliance with international conventions related to marine pollution by oil, and especially more effective detection of ships not abiding by national laws and international conventions, are also among the stated aims of the scheme.²⁰⁹

The project comprises both national and regional elements, including enhancement of oil spill response capabilities in the three countries involved, and elaboration of national and regional contingency plans; provision of equipment for combatting oil spills; rehabilitation and expansion of reception facilities at key ports, as well as a series of supporting measures, such as provision of pollution monitoring mechanisms; training; and technical and marketing studies to evaluate re-refining or alternative uses of recovered oily materials.²¹⁰ By July 1996, implementation was proceeding satisfactorily, with national contingency plans enacted for all three countries; training activities continuing; co-operative agreement to combat oil spills signed by the port authorities in the three countries; and the draft Regional Contingency Plan being finalised. Rehabilitation of deballasting facilities was the only sector where implementation had not yet begun by that date;²¹¹ this type of activity, together with construction of Vessel Traffic Services (VTS), and monitoring of sea water pollution levels need to be pursued more actively in the future.

Although the pilot project was a major step toward establishing sub-regional co-operation, and a catalyst in identifying the oil pollution issues and moving forward joint training and standardisation of equipment, its components had to be scaled down to fit the limited funds available at that time. This led to a proposed second scheme, intended to complement the former and extend its benefits to Egypt and Libya.²¹²

To this effect, GEF provided \$46,700 to the Egyptian Environmental Affairs Agency to organise a high-level conference in Cairo in December 1995, attended by representatives of the five countries, REMPEC, and MAP. Its primary objective was to facilitate a sub-regional discussion of the policy issues concerning a joint effort to reduce pollution in the South Mediterranean.

²⁰⁸ *Ibid*, p.4; see also pp.10 and 21. A legal framework for such co-operation is already in place by means of a 1991 Agreement on Maritime Co-operation among Member States of the Arab Maghreb Union, providing, *inter alia*, for co-ordination of legislation and national capabilities with the aim of preventing and controlling marine pollution (Art.3), see *ibid*, Annex 1.

²⁰⁹ See *ibid*, pp.4-5, 10 and 21.

²¹⁰ *Ibid*, pp.3 and.

²¹¹ See GEF, *Quarterly Operational Report*, July 1996, p.93.

²¹² See GEF web site at <http://www.worldbank.org/html/gef/>.

Consequently, the participants addressed broad issues of biodiversity conservation and coastal zone management, with special emphasis on regional collaboration on a broad strategy and framework for reducing the effects of land-based pollution on the marine environment. They laid the foundation for long-term co-operation in the sub-region and articulation of an action plan that will have national as well as regional benefits by reducing the threat of an accidental oil pollution disaster, which could conceivably devastate the already fragile coastal ecosystem. They, finally, decided to create a Regional Project Steering Committee (RPSC) to co-ordinate and implement future activities in this area, since experience from the pilot project showed that such an organ with a clear and well-defined role and objectives, as well as adequate project preparation, are essential to ensure success.

As a result, the proposed project focusses on further enhancing national and regional institutional capability to deal with marine pollution caused by land-based discharges and oil and ship wastes, as well as to improve the quality of coastal waters and ecosystems, protect biodiversity, and strengthen the ability of the five countries to intervene in case of oil spills. It specifically aims at:

- Enhancing marine pollution abatement and control in critical areas that are subject to ship wastes and industrial and land-based pollution;
- Strengthening the regional capacity to respond to oil spills;
- Adoption of a Regional Contingency Plan, which would ensure that the five countries have consistent regulatory policies, methodologies, and equipment, and that they allocate resources and operate efficiently;
- Provision of a comprehensive monitoring system to control maritime traffic and monitor compliance with international regulations;
- Implementation of appropriate and sound alternatives for processing collected oily materials, including possible marketing of by-products and other options for final disposal;
- Adoption of an action plan and implementation of its recommendations to ensure good coastal zone management and tackle general marine pollution; and
- Adoption of a comprehensive cost recovery principle to ensure the availability of adequate funds to finance project implementation, operation, and maintenance.

In order to meet the above objectives, the project will cover provisions for defining an action plan and Regional Contingency Plan and implementation of agreed actions; enforcement of a cost recovery system; provisions for private sector involvement through appropriate contracts between the recipient countries and specialised companies; construction and equipping of several control centres to provide national and regional pollution monitoring mechanisms; construction of Vessel Traffic Schemes at selected locations; joint training of personnel; rehabilitation of existing deballasting stations, and provision of additional multipurpose reception facilities to treat ship

wastes and ballast and bilge waters; identification and implementation of alternative uses for recovered oily materials and lubricants; construction of treatment plants for waste water and industrial discharges at key ports; and acquisition of mobile and floating equipment to collect oily materials and used lubricants, as well as floating and mobile equipment and material to strengthen oil spill response capabilities.

GEF will initially provide \$600,000 to finance comprehensive consultant studies, which will focus in detail on the objectives mentioned above and tackle the following activities: (a) consolidation of recommendations of completed and ongoing studies as well as updating them regarding threat to marine environment; (b) development and enforcement of legal and institutional framework for a Regional Project Steering Committee to co-ordinate and implement the project; (c) preparation of a Regional Contingency Plan for the collective co-operation among the five countries; (d) assessment and recommendations for linking the above Contingency Plan with the existing ones among other countries in the region; (e) definition of investment priorities responsive to individual and joint needs and the related planning of actions and investments based on realistic constraints; (f) quantifying pollution caused by land-based activities as well as those caused by navigating ships and oil tankers; (g) definition of baseline costs of the project and incremental costs; (h) development of scheme to recover investment, operation and maintenance costs; (i) recommendation of an appropriate cost-effective means of treating collected oily materials in an environmentally safe manner; and (j) preparation of the institutional set up referred to above. The total project cost is currently estimated at \$160 million, of which \$40 million will be financed through grants from the GET core funds; the balance will be financed by co-financing and the recipient governments.

One cannot help noticing a considerable progress from the pilot to the proposed project. Although some very positive elements are already present in the former, such as its explicit target of implementing international regulation, and especially MARPOL standards, as well as developing appropriate national and sub-regional infrastructure for monitoring compliance with international conventions related to marine pollution by oil, this project suffers from the same defect noted in the context of EPM, namely abundant rhetoric and fewer practical results. The new project, on the other hand, seems - at least at this early phase - to be framed in much more concrete and up-to date terms, adopting some still quite innovative approaches to pollution abatement, as, for instance, implementation of environmentally sound and processing and re-use of pollutants. However, it is still rather weak when it comes to spelling out specific measures to mitigate land-based pollution in the Southern Mediterranean. In this connection, it is rather unlikely that its medium-sized budget would suffice to implement any effective comprehensive plan.

6.5. Concluding Remarks.

It is now time to draw some overall conclusions from the preceding discussion, and evaluate the trends likely to mature in following years. The premises on which this evaluation rests is that, regardless of their long-term cost-effectiveness, environmental measures are not easily chosen as a first priority when countries concerned decide to allocate their finite resources. It follows that international assistance can act as a direct or indirect incentive to comply with respective international obligations, and even induce treaty parties to accept some form of effective compliance control.

In this sense, the Mediterranean Trust Fund is suitable only for support and co-ordination actions, and does not address the issue of the great cost of substantive anti-pollution measures. It would not be unjustified to say that it has exercised only indirect influence towards increased national awareness, capacity-building, and consequent observance of international standards, if viewed in the wider framework of co-operation in the provision of technical and other assistance to developing countries in the region. It is in this setting that the Secretariat's new-found readiness to formally assume an advisory and supportive role in helping individual countries acquire additional, and presumably more substantive, funding through other financial institutions and mechanisms, as well as the recent inclusion of capacity-building assistance for the implementation of international standards in MED POL activities, acquire increasing significance. In fact, these developments pave the way for gradual introduction of an articulated financial mechanism, somewhere along the lines of the Montreal Protocol Multilateral Fund, the absence of which is strongly felt in the Barcelona system, since it arguably leads to any efforts at effectively controlling compliance by the Parties proving futile.

Most of the other programmes of financial assistance examined in this Chapter are rather recent, and cannot be fully evaluated, as there is usually a time lag for data to become accessible in any meaningful quantities. However, one cannot help noticing that relevant activity is multiplying in the 90s. Hence, EPM provides a non-binding, but comprehensive, 'blueprint' for World Bank/EIB investment in the region. Its more substantial contribution so far is a considerable volume of preparatory work for specific projects, which, if they materialised, would have a very significant impact in the protection and enhancement of the Mediterranean marine environment in harmony with applicable international standards. At the same time, the GEF project for the South-Western Mediterranean, notwithstanding its explicit target of implementing international regulation, and especially MARPOL standards, as well as developing appropriate national and sub-regional infrastructure for monitoring compliance with international conventions related to marine pollution by oil is a modest start which could, nonetheless, be geared towards more tangible results in the future; hopeful signs of improvement in this connection are noted in GEF's proposed project concerning the whole of the Southern Mediterranean area.

Turning now to the EU, the importance its environmental funding mechanisms bear for Mediterranean Member States can be easily appreciated; in fact, by 1995, these countries figured as leading recipients with regard to resources provided by relevant instruments,²¹³ while the Cohesion Fund and the EIB provide even larger funds for environmental investments.

Be that as it may, any meaningful conclusions on the scope and utility of Community financial instruments for environmental protection can be inferred only when they are viewed as a coherent whole, in the sense that they aim at implementing relevant policies that are - in principle - consistent with each other. In this respect, despite efforts towards co-ordination, there has, in the past, been some considerable overlapping. Progress in this area is, however, being noted by means of a clearer distinction between structural and non-structural funds, through introduction of the Cohesion Fund and LIFE in the early 90s.

Another significant finding is that, at least before 1992, there was in general no explicit conditioning of Community assistance on compliance with environmental legislation.²¹⁴ In other words, there was incomplete connection of Community financing with the fulfilment of specific environmental obligations, and even inconsistency of various types of funding with stated environmental objectives; what is more, suggestions to this effect were straightforwardly rejected. This situation is being reversed in later instruments, despite weaknesses - especially with regard to translating the general idea into practice - that can still be traced even in the context of more advanced settings, such as that of the Cohesion Fund.

More specifically, the Cohesion Fund, although covering specific projects as opposed to comprehensive programmes, is the main source of waste water infrastructure funding for the region. However, its procedures of follow-up to ensure compliance with environmental legislation is not always effective, which results in some environmental damaging projects passing through. The Structural Funds have had an even more negative record, at least until their reform, but provide much larger funds and can, significantly, finance comprehensive programmes.

As far as ENVIREG and MEDSPA are concerned, these initiatives had very limited allocations and, consequently, have not had any great impact. LIFE, on the other hand, notwithstanding its limited resources and the fact that it is directed only to capacity-building as opposed to substantive environmental projects, incorporates the most current thinking on the issue of international assistance for environmental protection; its strict orientation towards enhanced implementation of environmental legislation is in this context unique. LIFE has an additional value as far as third Mediterranean states are concerned, in view of the fact that this is the only Community programme accessible to them, and as in the case of action at Community level, it is largely devoted to the much needed development of national capabilities in order to effectively

²¹³ See EC Commission, *op.cit.* n.55, Annex 1, Table 6.

²¹⁴ See EP Resolution *op.cit.* n.120, at para.7, where it is stressed that this should be changed.

implement international and regional environmental standards. LIFE II can thus become a significant - albeit not large - source of funding for the implementation of the Barcelona Convention and Protocols in the South and Eastern Mediterranean. It must, nevertheless, be noted that provision of resources in this context is again not explicitly linked with and conditioned on attainment of at least some of the MAP objectives.

All said, infringement procedures under Article 226 and financial programmes remain disconnected. Thus, if a project with Community funding leads to an infringement and a case brought before the ECJ, the Commission does not recover the sums paid automatically.²¹⁵ However, increased attention by the EIB and the Commission on compliance with environmental legislation and suspension of funding when this is not achieved is sometimes thought to have "greater impact on national and regional decision-making procedures than any procedure under Article 226... could have hoped to achieve".²¹⁶

Finally, the adoption of the MEDA Regulation in the broad framework of the 'Euro-Mediterranean Partnership', together with increased resources available from the EIB since 1992, point to a radical change of direction of the Community policy vis-à-vis non-member states. In particular, it is increasingly appreciated that the EU has an obligation to assist developing states in the region in their effort to address the environmental impacts of development. In this promising setting, however, the progress achieved in explicitly and strictly conditioning Community assistance on compliance with environmental legislation by Member States, cannot be easily duplicated, as the countries involved are not in any way bound by EU law. Having said that, the 'Euro-Mediterranean partnership' emphasises co-operation with international structures, such as MAP, and includes promotion of uniform legislation, at least for some environmental sectors, in its agreed targets; hence, it could be possible to envisage a future development involving conditioning of financial aid on adherence to international and regional environmental standards. This is likely to have a great impact on the region, as multiple relationships and interaction between the EU and third Mediterranean states will deepen in the context of the wide economic and political integration process that has already began.

²¹⁵ See L.Krämer, *E.C. Environmental Law*, 4th ed., 2000, pp.292-3.

²¹⁶ L.Krämer, *E.C. Treaty and Environmental Law*, 3rd ed., 1998, p.172.

CHAPTER 7.

***COMPLIANCE CONTROL AND ENFORCEMENT OF
INTERNATIONAL ENVIRONMENTAL OBLIGATIONS IN THE
MEDITERRANEAN UNDER NATIONAL LAW.***

The preceding discussion focussed exclusively on international mechanisms to promote and ensure compliance with environmental treaty undertakings. From a different standpoint, this Chapter looks at national legal systems and their mechanisms to accommodate, implement and enforce international environmental law. This perspective becomes totally relevant in view of the nature and extent of international rules for the protection of the Mediterranean Sea against pollution.¹ The fact that these rules call for implementation principally at the domestic level imports some very significant parameters in our discussion: First, it potentially turns national implementation into an international concern and thus legitimises a certain intervention of international law; secondly, it brings into play the comparatively well-developed and authoritative domestic legal systems with their full arsenal of enforcement procedures, as well as the natural custodians of the protected environmental assets, namely sensitive individuals citizens and non-governmental organisations. It is, therefore, submitted that the national-legal-system route bypasses, at least in principle, some of the barriers inherent in a purely international system of compliance control exposed in previous Chapters.

As was demonstrated in Chapter 2, so far states have accepted that the world community has an interest in controlling activities carried out within their exclusive jurisdiction and in maintaining the quality of their own marine environment,² but there is, as yet, no concomitant recognition of the need to devise new enforcement mechanisms that would accommodate that community interest, as well as a notable unwillingness to transfer enforcement powers to international organs.³ In order to minimise the effect of this obstacle international law may be viewed as part of national law and international obligations as having little or no difference from

¹ See *supra*, Chapter 2.

² On the trend towards internationalisation of the domestic environment of states and consequent erosion of domestic jurisdiction, a development similar to that in the area of human rights, see A.Boyle, 'The Role of Human Rights Law in the Protection of the Environment', in A.E.Boyle & M.R.Anderson (eds.), *Human Rights Approaches to Environmental Protection*, 1996, pp.43-69, at pp.54-5. According to the author, primary examples of this trend are the Biodiversity Convention and 'sustainable development', the latter representing "an entirely different view of what is 'international' about the environment than we have seen before", *ibid*, pp.55-6. See also A.E.Boyle (ed.), *Environmental Regulation and Economic Growth*, 1994, pp.174-9; and M.A.Schreurs & E.Economy, *The Internationalization of Environmental Protection*, 1997, for a political science perspective.

³ See also P.Sands, *Principles of International Environmental Law*, Vol.I, 1995, p.154 *et seq.*.

domestic ones,⁴ so as to explore the ready-made possibilities that the highly developed - when compared to the international - national legal orders provide. Then, anyone citizen or NGO having appropriate standing and wishing to enforce an international environmental regulation could resort to a domestic court or administrative agency to challenge both private and governmental actions or inactions, and thus bring pressure on the executive to comply with their international commitments;⁵ in fact, national courts and administration are in most cases the only *fora* available to these actors.⁶

This is by no means an original notion; it basically forms an age-old part of mainstream international law doctrine. However, the idea has been regularly underrated in the environmental context. The reasons for that phenomenon are basically the overwhelming obstacles of diverse legal systems and policies affording few public rights of a substantive or procedural nature, a notable reluctance to interpret international law in a way that could impose considerable burdens on the executive, as well as a great variety in the degree of priority awarded to environmental protection.⁷

Despite this reality, there are today promising signs of change and innovation, both at the state and the international level: Increasing environmental awareness leading to more democratic accountability for state authorities, widening procedural rights serving to challenge environmentally destructive actions, and a changing attitude of the judiciary are developments taking place within national borders, stimulated by international legal arrangements incrementally establishing procedural public rights and concomitant duties, mainly in Europe and the West, following the flux of substantive environmental law-making of the last two decades.

Accordingly, this Chapter will consider the issue of compliance control and enforcement of international environmental obligations from the perspective of national legal orders in the Mediterranean region. More specifically, it will examine the relevant provisions of applicable conventions, and how these have influenced national legislation. Then, it will address the question of enforceability of applicable international norms in individual states, should the latter fail to adapt their legislation to the said rules; in other words, it will examine the place of conventional obligations in the domestic legal hierarchy in Mediterranean states. The same questions will subsequently be asked in the context of Community environmental law, which presents many distinct and advanced features, with special emphasis on Mediterranean Member States.

⁴ See R.Fisher, *Improving Compliance with International Law*, 1981, at Chapter IX; and J.Ebbesson, *Compatibility of International and National Environmental Law*, 1996, p.xix..

⁵ See Sands, *op.cit.* n.3, pp.158-60; and Boyle, *op.cit.* n.2, pp.64-5.

⁶ See E.Hey, 'The European Community's Courts and International Environmental Agreements', 7(1) *R.E.C.I.E.L.*, 1998, pp.4-10.

⁷ See Boyle, *op.cit.* n.2, p.64. Note that researchers adopting the 'transnational' approach to international environmental law had already suggested the inclusion of domestic courts and administration in a global environmental protection system from the early 70s, see, e.g., C.A.Fleisher, *Draft Convention on Environmental Co-operation Among Nations*, 1972.

7.1. Implementation of International Environmental Obligations in Mediterranean Countries.

As has been succinctly put, "the truly legal function of international law essentially is found in the internal legal systems of states. Only through what we could term 'domestic legal operators' can we describe the binding character of international law or, better still, its ability to be implemented in a concrete and stable fashion."⁸ Be that as it may, it is equally true that the precise steps a state has to take in order to implement its international obligations - including environmental ones - largely depends on the nature of the respective rule.⁹ If it involves an omission, i.e. it is a duty to refrain from a certain activity, no positive action has to be undertaken. That is, of course, so to the extent that the state itself is the only actor who can carry out the prohibited act; otherwise, it has to see that the prescribed behaviour is made illegal within its jurisdiction. Where positive action is prescribed, a state has to adopt implementing legislation, policies and programmes and to ensure that these are complied with by those subject to its jurisdiction and control.¹⁰ Effective implementation, thus, comprises, apart from a legal framework,¹¹ structures to ensure follow-up and deal with non-compliance.

It follows that formal legislative action, as well as a series of practical measures and sometimes institutional changes, are usually required to give effect to international environmental rules.¹² The institutional mechanisms that have to be put in place in each country in order to achieve environmental objectives and to verify that all persons and corporations comply with them have to be consistent with the cultural, social and economic fabric of the country; hence, there is no recipe for establishing a best system that will develop and adapt as actual practice generates feedback.¹³

As far as the means a state will employ to address violations of prescribed standards are concerned, specific sanctions, i.e. whether it will be criminal penalties, civil remedies, administrative or fiscal measures, and voluntary restraints, are commonly left to its discretion,

⁸ B.Conforti, *International Law and the Role of Domestic Legal Systems*, 1993, p.8.

⁹ See *Y.B.I.L.C.*, 1977, Vol.II, Part 2, pp.11-30; *supra*, Chapter 4, pp.142-3, on the distinction between obligations of conduct and of result; and Ebbesson, *op.cit.* n.4, Chapter 3, on the discretion of states in the implementation of international standards.

¹⁰ See, for example, Basel Convention, Arts.4(4) and 9(5); Bamako Convention, Art.9.

¹¹ As Judge Pescatore puts it, "many of the treaties have no use and no substance if they are not duly put into operation in the sphere of domestic law", P.Pescatore, 'Conclusions', in F.G.Jacobs & S.Roberts (eds.), *The Effect of Treaties in Domestic Law*, 1987, p.274.

¹² For thorough research into the relevant practice of several states, at different levels of development, in relation to five environmental treaties, see E.Brown Weiss & H.K.Jacobson (eds.), *Engaging Countries - Strengthening Compliance with International Environmental Accords*, 1998, Chapters 6-14; and D.Vogel & T.Kessler, 'How Compliance Happens and Doesn't Happen Domestically', in *ibid.*, pp.19-37. See also D.G.Victor, K.Raustiala & E.B.Skolnikoff (eds.), *The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice*, 1998, Chapters 8-15.

¹³ See UNEP IE/PAC (Industry and Environment Programme Activity Centre), *From Regulations to Industry Compliance: Building Institutional Capabilities*, *Technical Report No.11*, 1992, p.7.

although some international instruments impose on states an explicit duty to institute criminal penalties.¹⁴

Let us illustrate these points using the MARPOL Convention: This instrument provides a good example of how complex a task implementation of an international convention can be, especially when it lays down requirements of a technical nature.¹⁵ The actors involved in MARPOL's effective implementation include the government of the State-Party and its legal and marine administration, the shipowners, and the port authorities. Ideally, when ratification or accession is being considered, all these sectors should consult in order to be properly prepared to implement all standards and processes prescribed. Generally speaking, MARPOL obligations relate to preparation of legislation, including regulations; surveys and inspections; constructional, equipment and operational requirements; documentation; and relevant procedures.

At the legal level, it is necessary to consider whether existing legislation gives the power through which the Convention may be integrated into the national legal system, or it needs amending, or whether new enabling legislation is required. In the specific context of MARPOL, it is important that implementation of amendments and associated resolutions and recommendations be permitted, which is moreover typical of most of the instruments that have been examined so far. The Regulations laid down in MARPOL's Annexes can to a large extent be reproduced as national regulations with only minor changes, in order, for instance, to include definitions given in the instrument's main body. These Regulations sometimes refer to other IMO instruments, like the International Maritime Dangerous Goods (IMDG) Code; hence, national laws must dictate observance of these as well. This legislation should also provide for inspection, detention and penalties suitable for each case.

At the organisational level, MARPOL imposes duties that make the existence of an effective marine administration, staffed with at least a minimum of qualified personnel, imperative. Its duties, apart from drafting the above-mentioned legal instruments, include issuance of certificates and maintenance and updating of records of ship certification; design and equipment approval; issuance of instructions to surveyors; delegation of surveys and issue of certificates to appropriate organisations; gathering of survey reports and violation reports; prosecution of offenders; monitoring reception facilities; and contribution to the functioning of IMO, and especially its MEPC, in the form of proposals, information on how the above duties are being discharged, reports, and participation in the meetings.

¹⁴ See, for example, Basel Convention, Art.9(5); LOSC, Art. 217(8).

¹⁵ See generally, *MARPOL - How to Do it. Manual on the Practical Implications of Ratifying and Implementing MARPOL 73/78*, 1993; see also S.Kuwabara, *The Legal Regime for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources*, 1984, pp.107-8, which recommends a similar manual or guidelines or even model legislation to be developed in the context of MAP to address the lack of expertise and experience in drafting or implementing environmental legislation in a number of Mediterranean countries.

Shipowners or operators have to ensure that every ship has been equipped to the relevant Annex I requirements; has been surveyed; has an appropriate certificate; an Oil Record Book; and a crew instructed and trained to comply with the discharge criteria. If a liquid substance in bulk, other than oil, is involved, producers and shippers have to ensure that its characteristics are known and that it has been assessed and is listed in one of the Annex II appendices, or, if it is not listed, that it has been provisionally assessed by IMO; if it is not listed nor assessed, they must confirm that the guidelines for provisional assessment are followed and conditions for its carriage are established with the relevant marine administration. They also have to make sure that the ship to be used has been surveyed and found suitable, and is appropriately certified and manned with a trained crew. When it comes to packaged harmful substances, producers and shippers have to ensure that the cargo is properly identified, packed, marked, labelled, documented, stowed and secured in accordance with the IMDG Code. Shipowners also have to make sure that their ships are equipped with a suitable sewage treatment plant or an accepted alternative system, and have adequate arrangements for dealing with garbage; that they are surveyed and provided with the relevant certificates, and have an appropriately trained crew.

Port authorities have generally to ensure that adequate reception facilities are available not just for oil, but also for different kinds of liquid noxious substances, sewage and garbage. MARPOL addresses this obligation to the governments of the Parties, which, in practice, means that the government will require a port authority or terminal operator to provide the facilities, either through legislation placing a duty on ports, followed by investigation of reports on inadequacies and serving of enforcement orders, or through legislation and a regime of inspection and licensing. For a harbour or terminal to satisfy the relevant requirements, it is not enough simply to have some facilities; these must be of sufficient capacity and appropriate design to accommodate all ships that will need to use them without suffering any undue delay. Therefore, the port authority has to assess the quantity and quality of residues, mixtures and material to be dealt with, and decide on the type of facility to be employed.

The master of a ship faced with non-existent or inadequate reception facilities should, when the problem cannot be solved by the port authorities at the time, submit details of the inadequacy on a report form and send it to the port state, which has to take up action with the port concerned and inform the flag state and IMO. The ship master is also under a duty to report the particulars of any incident entailing the discharge or loss into the sea of oil, noxious liquid substances, and harmful substances in packaged form, to the nearest coastal state, and the shipowner must issue appropriate instructions and assume the reporting obligation should the ship be unable to provide the required information. The marine administration, on its part, should establish a ship reporting system and notify mariners of full details of the requirements to be met and procedures to be followed, including nominating the shore establishment responsible for the operation; issuing

instructions for the relay of information; instructing those nominated to receive reports on what action they should subsequently take; prosecuting those who fail to report such incidents; and notifying IMO of the relevant arrangements.

All these day-to-day activities are to be supervised by the national administration and any infringements dealt with, which goes to show how demanding and unrelenting the task of effective implementation of an international convention can be.

That said, one must always bear in mind that there is a distinct category of international obligations - a very important category in the context of MAP and the LOSC - that cannot be discharged at the domestic level. These are typically obligations of co-operation which require an international *forum*, or several for that matter, to be implemented.¹⁶ Be that as it may, it is interesting to look at what the applicable instruments provide with regard to their implementation within state borders.

7.1.1. Treaty Provisions on National Implementation.

Although international political science teaches that implementation of specific environmental policies in a state is rather "a combination of binding international law and public exposure of non-compliance (often by less inhibited non-governmental organisations), normative persuasion, scientific argument, technical assistance, and investment",¹⁷ than merely a matter of compliance with legally binding standards imposed on governments by international institutions, from their own perspective, treaties usually commit states "to take all appropriate measures, in conformity with international law".

7.1.1.1. The LOSC and Other Instruments.

Practically all instruments examined in Chapter 2 contain some explicit or implicit indication of what the parties undertake to do within their own jurisdictional domain. The LOSC, for instance, reaffirms the duty of its Parties to 'adopt laws and regulations... to implement applicable international rules and standards' or 'to enforce their laws and regulations' (Arts.213, 214, 222), already imposed under general international law and/or specific conventions (Art.216). These provisions do not, therefore, add anything new, but rather put special emphasis on actual implementation and enforcement of the respective international rules - especially if read together with the obligation to set standards 'no less effective' than the international ones when regulating various sources of pollution (e.g. Art.210(6) with regard to dumping).¹⁸

¹⁶ And see, *supra*, Chapter 2, pp.86-90.

¹⁷ R.O.Keohane, P.M.Haas & M.A.Levy, 'The Effectiveness of International Environmental Institutions', in P.M.Haas, R.O.Keohane & M.A.Levy (eds.), *Institutions for the Earth - Sources of Effective International Environmental Protection*, 1993, p.17.

¹⁸ But cf. Art.212(1), which requires national regulations regarding pollution through or from the atmosphere merely to "take into account" internationally agreed rules, standards and recommended practices and procedures.

Only when it addresses pollution caused by ships, does the LOSC become more restrictive and clearly channels enforcement of international standards through various national legal systems. Hence, flag states have to ensure compliance by vessels flying their flag, and to this end they must provide for the effective enforcement of relevant rules, irrespective of where a violation occurs (Art.217(1)). What is more, penalties provided for by flag laws and regulations must be adequate in severity to discourage future violations (Art.217(8)). From an opposite angle, the Convention does not allow for penalties other than monetary, when a coastal or port state takes action against a foreign vessel (Art.230(1)), save in cases involving a serious and wilful act of pollution in that state's territorial sea (Art.230(2)), i.e. when the passage of the vessel has lost its innocence (Art.19(h)).

An interesting question that arises in this context is who has the duty or right to ensure implementation of international rules in relation to a shared resource or the commons. Usually, it is the states under whose jurisdiction the polluting activity falls. The LOSC provides a useful illustration of that rule by, for example, addressing the provisions that deal with ship pollution of the high seas primarily to flag states and those dealing with land-based sources to coastal states. However, the LOSC has also introduced a very significant innovation, namely the port state power to enforce against foreign ships for pollution offences wherever committed (Art.218), including the high seas.¹⁹ It has, thus, assigned individual states with an additional new duty, to enforce international law with regard to violations committed not only within their jurisdiction, but also beyond that in common areas.

Moving away from the LOSC, the London Convention requires its Parties to ensure that all vessels and aircraft included in their registers, or loading in their territory or territorial sea matter do be dumped, or engaged in dumping in areas under their jurisdiction, comply with the conventional stipulations (Art.VII(1)). In the same vein, Parties have to take measures to prevent and punish infringements of the Convention, and develop procedures for effective application thereof on the high seas (Art.VII).

Finally, as far as seaborne movement of hazardous wastes is concerned, the Basel Convention instructs its Parties to take appropriate legal, administrative and other measures to implement and enforce its provisions, including measures to prevent and punish conduct in contravention thereof (Art.4(4)), especially illegal traffic of hazardous waste (Art.9(5)). The Bamako Convention goes even further and requires its Parties to prohibit import from non-parties and to treat it as a criminal offence (Art.4(1)). More generally, any illegal act of import must be penalised in national law in a way that such conduct will be both punished and deterred (Art.9(2)).

¹⁹ See, among others, B.Kwiatkowska, *The 220-Mile EEZ in the New Law of the Sea*, 1989, pp.180 *et seq.*; G.Kasoulides, *Port State Control and Jurisdiction: Evolution of Port State Regime*, 1993, pp.117-22; and J.P.A.Bernhardt, 'A Schematic Analysis of Vessel Source Pollution: Prescriptive and Enforcement Regimes in the Law of the Sea Conference', 20(2) *Virginia J. of Int'l L.*, 1980, pp.284-6.

7.1.1.2. The Barcelona Convention and Protocols.

Turning to regional law, it is noteworthy that, until the 1995 revision, in the Barcelona Convention and its Protocols there was no direct reference either to domestic legislative measures or to sanctions imposable on persons in breach of the treaty rules.²⁰ Only the Dumping Protocol contained a pertinent reference in Article 11(1), whereby each Party had to apply the measures required to implement the Protocol to all ships and aircraft registered in its territory, or loading there matter to be dumped, or engaged in dumping in areas under its jurisdiction. The absence of such provisions in earlier instruments did not imply a lesser duty to comply with the commitments laid down therein and to implement them domestically, however. As Professor Raftopoulos notes, the obligation to proceed to both formal and effective implementation was clearly there and it was, notably, a continuous one.²¹

The new Article 14 now lays down a duty of formal implementation in explicit terms:

“Environmental Legislation.

1. The Contracting Parties shall adopt legislation implementing the Convention and the Protocols.
2. The Secretariat may upon request from a Contracting Party, assist that Party in the drafting of environmental legislation in compliance with the Convention and the Protocols.”

This is a clear improvement compared to the previous absence of any relevant stipulation. It might seem self-evident that the Parties have to adapt their national legal system so as to fulfill norms agreed at the international plane, but in reality they rarely do so.²² The rejection of an initial proposal submitted by the Secretariat, whereby the latter would be authorised to “review the compliance of national legislation with the Convention and the Protocols and... report... to the Meetings of the Contracting Parties”, and even assist in the enforcement of this legislation - although it is not clear what such assistance would entail -²³ is characteristic of the tendency to retain as much discretion as possible in the implementation of international commitments at home. Thus Article 14 is still formulated in very general terms whose main value is likely to be the possibility of involving the Secretariat in the drafting of implementing legislation, when and if a Party decides so.

Having said that, the more recent Protocols admittedly devote more attention to these issues: The Offshore Protocol contains a rather extensive provision in this respect; in Article 7, each Party is instructed to prescribe sanctions to be imposed for breach of obligations arising out of the Protocol, or for non-observance of the implementing national laws and regulations, or non-

²⁰ Cf. 1983 Quito Land-Based Sources Protocol, Art.XIII.

²¹ E.Raftopoulos, *The Barcelona Convention and Protocols - The Mediterranean Action Plan Regime*, 1993, p.62.

²² See *infra*, pp.300-6.

²³ See UNEP, Meeting of Legal and Technical Experts to examine amendments to the Barcelona Convention and its related Protocols and the Mediterranean Action Plan (MAP), *Proposed Amendments to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols*, UNEP(OCA)/MED WG.82/3, 20 October 1994, p.15.

fulfilment of specific conditions attached to the authorisation granted to the operator of an offshore installation. Moreover, sanctions must be imposed in relation to illegal discharges of wastes and harmful substances from offshore installations (Art.13(c)). Similarly, the Waste Protocol speaks of appropriate legal, administrative and other measures to prohibit the export and transit of hazardous waste to developing countries (Art.5(4)), but also directly commits parties to "introduce appropriate national legislation to prevent and punish illegal traffic, including criminal penalties on all persons involved in such illegal activities" (Art.9(2)).

But more important in view of its subject-matter affecting a very wide range of production and consumption activities in each country is the amended Land-Based Protocol, which contains a provision that might have been implied in the previous version, but is nevertheless significant to be clearly spelled out. Pursuant to new Article 6, discharges and releases into water or air that reach and may affect the Mediterranean area are to be "strictly subject to authorisation or regulation by the competent authorities of the Parties", taking due account of the provisions of the Protocol and Annex II - which defines certain elements that have to be considered when issuing permits -, as well as the decisions and recommendations of the Meeting of Parties. Moreover, it is specifically required that the Parties set up "systems of inspection" to assess compliance with authorisations and regulations, for which they can request the Secretariat's assistance, and that they establish "appropriate sanctions in case of non-compliance" and "ensure their application". Those are fairly concrete and precise undertakings regarding the conduct of administrations in the region in order to control land-based pollution and as such represent a considerable improvement in the notoriously vague formulation of MAP obligations.

Despite recent progress, however, it is generally conceded that, in the context of MAP, co-ordination at the level of technical and scientific information has been much more successful than integration of technical and scientific standards "into a normative language and a standardized methodology"; the latter "has been proved immeasurably more demanding".²⁴ In fact, there has not even been adequate information regarding legislative implementation of the Barcelona Convention and Protocols at the domestic level, and only a minimum systematic review of the legal and policy responses to the Mediterranean pollution and conservation problems.²⁵ The most official source, the Deputy Co-ordinator of MAP admits that the Secretariat knows nothing about implementation by individual Parties of the Barcelona Convention and Protocols,²⁶ which leaves much to be desired

²⁴ See E.G.Raftopoulos, *The Mediterranean Action Plan in a Functional Perspective: A Quest for Law and Policy*, *MAP Technical Reports* No.25, 1988, p.45.

²⁵ *Id.*

²⁶ In letter of L.Jeftic with the author. It is especially characteristic of the very limited preoccupation of MAP institutions with the issue that in an official document, namely UNEP, *The State of the Marine and Coastal Environment in the Mediterranean Region*, *MAP Technical Reports Series*, No.100, 1996, p.95, it is asserted: "For the most part, international legislation does not apply to coastal terrestrial development and the question of implementation and compliance does not arise. This also holds essentially true for territorial sea." And this is despite the express application
(continued...)

in terms of follow-up, if the new provisions are to exert any substantial influence. Notwithstanding lack of official data, it is, nevertheless, worthwhile to attempt an assessment of how the legal framework of MAP has influenced pertinent legislation in Mediterranean countries.

7.1.2. Environmental Legislation in Mediterranean Countries.

Since the first studies in preparation for MAP were carried out over twenty-five years ago, the situation regarding control of polluting activities around the Mediterranean coast has, of course, greatly changed. In the 1972 FAO report on legislative controls of marine pollution in the region,²⁷ there was an apparent lack of data, both on the actual pollution loads and on relevant national policies and laws, especially as far as the African coast was concerned.²⁸ But even in the most industrialised and affluent Northern sub-region an overwhelming percentage of domestic waste was being discharged at sea completely untreated, as purification plants were scarce, while intensive industrial and agricultural production was increasingly becoming a major threat, with control policies only at nascent state.²⁹

Indeed the limited amount of relevant legislation was described as 'abstruse and insufficient', and at the same time traditional both in terms of substance, since it dealt with only sectoral issues such as the discharge of specific toxic substances and did not cover pollution other than oil in areas beyond national jurisdiction, and in terms of method typically using prohibition and threat of punishment and generally lacking a preventive approach or incentives to compliance.³⁰ Most importantly, the reality of non-enforcement of these rules was already emerging.³¹

In 1984, Kuwabara surveyed the national legislation in place to deal with land-based sources of pollution of the Mediterranean Sea,³² and concluded that only few states had laws directly controlling the discharge of wastes from the coast into the sea.³³ This was, not surprisingly, coupled with a lack of treatment systems for such wastes.³⁴ Specific polluting substances, such as heavy metals and detergents were found to be regulated in very few cases, while legislation protecting amenities, except for litter, and marine ecosystems as such was also scarce. The situation was somewhat better only as far as protection of freshwater and regulation of pesticides was concerned.

²⁶(...continued)

of - at least - the Barcelona instruments to both territorial seas, and often internal waters, and to land activities causing marine pollution, as has been clearly shown in Chapter 2.

²⁷ GFCM, The State of Marine Pollution in the Mediterranean and Legislative Controls, *Studies and Reviews* No.51, 1972.

²⁸ *Ibid*, p.5 and 13.

²⁹ *Ibid*, pp.5-11 and 13-32.

³⁰ *Ibid*, pp.52-53 and 36 respectively.

³¹ *Ibid*, p.41.

³² See Kuwabara, *op.cit.*, n.15, Chapter 4.

³³ *Ibid*, p.104.

³⁴ *Ibid*, p.105.

With regard to the quality of relevant legislation, Kuwabara found that it usually contained mere prohibitions with regard to 'harmful' substances without quantitative or qualitative definitions of what 'harmful' means, and that it was mainly sectoral in character, although he discerned a trend towards a more comprehensive approach,³⁵ as well as towards greater integration of environmental considerations into the planning of industry in coastal areas, through increasing establishment of prior authorisation systems for new installations. Moreover, a tendency to install an 'environmental focal point', either in the form of an *ad hoc* ministry or a committee, to co-ordinate the work of the various branches of the government in the field of marine protection was identified; while, on the other hand, the actual power to grant licences or authorise discharges remained decentralised, usually in the hands of local authorities.³⁶ However, this account was based on secondary sources seriously outdated, even by 1984 standards, and thus has some value only in so far as it helps trace the historical evolution of marine protection legislation in Mediterranean countries.³⁷

In an effort to work more intensely towards identifying gaps in the various legal systems of marine protection, the Barcelona Convention Parties decided in 1987 to authorise the compilation of Greek legislation pertaining to the Barcelona Convention,³⁸ as a model for similar compilations of legislative provisions in other countries.³⁹ Such a task was understandably fraught with difficulties, in view of the fact that there is rarely a systematic distinction of environmental legislation from other more comprehensive sources of national law, or a compilation or codification for domestic purposes for that matter.⁴⁰ This is why this effort progressed at a rather slow rate and only in 1992 has it been possible to produce a first comparative analysis of three Mediterranean states' marine pollution legislation, namely Greece, Israel and Egypt.⁴¹

This study furnishes valuable information from which some interesting - albeit tentative - lessons can be learned. The main and most striking finding is that relevant pieces of legislation have almost entirely been promulgated prior to the entry into force for each Party of the Convention or the Protocol to which they functionally correspond; hence, one cannot talk of 'implementing laws' *stricto sensu*. It is worth mentioning only exceptions to this pattern: Greek legislation on issues covered by the Emergency Protocol has mostly been issued after the latter's ratification; the same

³⁵ *Ibid*, pp.105-6, especially in the legislation of France, Algeria, Italy, Syria, and Turkey.

³⁶ *Ibid*, pp.106-7.

³⁷ See *ibid*, Chapter 4, fn.1, where the secondary sources on national legislation are listed, the latest being a 1976 edition.

³⁸ By E.G.Raftopoulos, presented in 1988 in *op.cit.* n.24.

³⁹ See UNEP, Report of the Fifth Ordinary Meeting of the Contracting Parties to the Convention on the protection of the Mediterranean Sea against pollution and related Protocols, UNEP/IG.74/5, 28 September 1987, p.51. The Sixth Meeting of the Parties in 1989 further approved such studies to be carried out for four more countries, see Report of the Sixth Ordinary Meeting of the Contracting Parties, UNEP(OCA)/MED IG.1/5, 1 November 1989, Annex VI, p.7.

⁴⁰ See Raftopoulos, *op.cit.* n.21, p.47.

⁴¹ UNEP, *Compilation of Environmental Legislation Relative to the Barcelona Convention - Comparative Analysis*, UNEP/BUR/40/Inf.3, 15 January 1992.

is true for Egyptian laws dealing with agriculture, that have been promulgated or amended after ratification of the Athens Protocol. The study suggests that, in essence, the relational links between the Barcelona Convention and Protocols and relevant national legislation can be traced not only prior to the introduction of the former into each national legal order, but also prior to the very establishment of the Barcelona Convention system.⁴² On condition that the compilation is fairly complete, this clearly implies that the Parties - at least those examined - do not take legislative action once they become bound by an international instrument. If there is a degree of compliance with conventional stipulations, it is 'accidental'. Of course, one can reverse this line of reasoning and consider the possibility that, in effect, states enter into an international agreement only so far as they have secured that no major legislative reform is going to be needed as a result of their being bound by international law.

A closer look at the content of the legislation examined may shed some light on these thoughts. According to the study, the legislation of Egypt covering the subject-matter of the Dumping and Emergency Protocols is sectoral and risk-oriented;⁴³ both Protocols are only partially covered (Dumping Protocol, Arts.4, 11, and 12; Emergency Protocol, Arts.3 and 8). As far as the subject-matters of the Athens Protocol are concerned, Egyptian regulations seem inadequate; relevant laws are sectoral and risk- and use-oriented and cover only some of its provisions, usually with "weak implementing combinations".⁴⁴

The legislation of Israel relating to the Dumping Protocol is characterised by a trend from a sectoral to a more comprehensive approach, with the more recent all-inclusive environmental laws on the prevention of marine pollution cover almost all substantive and procedural duties laid down therein.⁴⁵ The regulations relating to the issues covered by the Emergency Protocol are sectoral risk- and use-oriented, but together with the comprehensive instruments and the ratification of MARPOL address almost all aspects of the Protocol, despite a degree of weak implementation of Articles 4 to 7. The trend towards comprehensive laws is also discernible in relation to the Athens Protocol; these recent instruments cover adequately all substantive duties, but only one procedural (Art.8).

Greek legislation on dumping is characterised by a trend towards a combination of comprehensive and specific sectoral legislation, covering almost all substantive and procedural duties of the relevant Protocol, except those of Articles 8,9 and 12,⁴⁶ and the same is true for legislation pertaining to the Emergency Protocol. The situation with regard to the Athens Protocol is more complex: The system-oriented law 1650/1986 on the Protection of the Environment covers the inadequacies of risk-oriented legislation with regard to control of industrial activities, while a

⁴² *Ibid*, p.91.

⁴³ *Ibid*, p.92.

⁴⁴ *Ibid*, pp.92-3.

⁴⁵ *Id*.

⁴⁶ *Ibid*, pp.93-4.

combination of different types of instruments addresses the issue of pollution transported through watercourses, especially the relevant substantive obligations; the same holds for management of municipal and industrial waste issues. With regard to other sectors, however, which are regulated by the comprehensive law in more abstract terms, implementation is poorer, as, for instance, with regard to the management of solid, toxic and hazardous wastes, and to control of agricultural activities. This is even worse in relation to urban planning, where the applicable sectoral body of legislation does not cover Articles 5 and 6 of the Athens Protocol, nor any administrative duties, whereas two relevant comprehensive laws deal only with issues arising from Articles 4, 6 and 7.

The study suggests that a crucial factor that determines the level of progress are problems associated with the country's economic development. Indeed, the major part of relevant legislation was issued before 1980, and only 9% was later amended, while post-1980 legislation deals mainly with these aspects of the Barcelona Convention system that are more germane to the types of environmental problems faced by developing countries and to the level of development of their administrative infrastructure.

All said, it must be borne in mind that all the above refer only to formal compliance with international undertakings. It is a completely different question - and one much more difficult to answer - whether this legislation is observed by state and private persons alike. The comparative analysis provides some insight on another aspect of internal legal orders that is very relevant to this last issue, namely on the institutional structure that exists in the three countries, which is a crucial actor both in terms of law-making and of follow up and enforcement of the rules once they are established.⁴⁷

More specifically, since the early 80s, Greece has developed an institutional system which is a combination of authority for environmental matters lying with different traditional ministries still retaining certain related competences and an *ad hoc* institution, the Ministry of the Environment, Physical Planning and Public Works.⁴⁸ Although co-ordination problems have by no means been eliminated, the latter organ plays a catalytic and central role in that it has promoted the promulgation of comprehensive, system-oriented environmental legislation, it has initiated and guaranteed the harmonisation of Greek environmental rules with those of the EU and promoted the ratification of environmental treaties. The study also suggests that the Ministry has additionally played a central role in integrating environmental considerations into developmental legislation.

The evolution in Israel is broadly similar, although here it happened without any instigation from realities such as participation in the EU. Since the establishment of the Ministry of the

⁴⁷ Note that the structure of administration with the ultimate authority in environmental matters varies greatly in Mediterranean countries: for instance, Albania, Cyprus, France, Greece, Italy, Israel, Lebanon, Morocco, Slovenia, Spain, Tunisia, and Turkey have an environmental ministry; others have a special agency (Croatia, Egypt, Libya), sometimes under the Ministry of Public Works (Monaco), or of the Interior (Algeria).

⁴⁸ UNEP, *op.cit.* n.41, p.95.

Environment in 1987, there is a distinct tendency in Israeli environmental legislation towards more comprehensive laws, better environmental management and enhanced integration of relevant considerations in economic activities and land-planning.⁴⁹ In Egypt, on the other hand, the institutional system is still sectoral, despite establishment of the Environment Affairs Agency in 1982.⁵⁰

It must have become clear by now that measuring the effectiveness of a regime such as MAP is an extremely complex and arguably unattainable task. Skjærseth attempted such an evaluation in 1992,⁵¹ despite his explicit recognition of the difficulties involved.⁵² His main conclusion was that although Mediterranean co-operation was a political success, the main goal of the Barcelona Convention, i.e. to enhance the marine environment, has not been successfully met. "Compared to a situation without any environmental co-operation," he says, "it seems clear that the Mediterranean would have suffered from more severe pollution than today"; however, this achievement is viewed as a result of natural market variations, technological improvement and other co-operative efforts, like those within the EU, than MAP. His most useful finding for present purposes, though, is that "there is a widespread tendency that the Parties fail to comply with their legal obligations".⁵³ From a legal standpoint, that basically means that they do not enact implementing legislation, let alone make sure that such norms are respected.

On the other hand, in 1990 Peter Haas was assessing national implementation in a remarkably positive way. In particular, he thought that governments in the region had increasingly adopted more comprehensive pollution control legislation, which moreover was enforced "with greater vigor". He concluded that "states actually comply with their Med Plan obligations".⁵⁴ Unlike Skjærseth, Haas considers water quality an inappropriate indicator of compliance, in view of the flaws in relevant data; he rather thinks that development of pollution control measures should be looked at to assess the measure of compliance with MAP.⁵⁵ In this context, he considers the creation of central national institutions responsible for environmental issues a major factor contributing to the adoption of coherent marine pollution control policies, despite the fact that only in Egypt, Libya and Turkey were such institutions created after the respective countries became involved in MAP.⁵⁶ The most adequate and comprehensive legislation, according to this study, was found in France -

⁴⁹ *Id. Cf. A. Bin-Nun, The Law of the State of Israel: An Introduction*, 1992 (2nd ed.), pp.91-6, whereby there are still colliding competences and jurisdictions, as well as lack of widespread awareness of the significance of environmental protection.

⁵⁰ UNEP, *op.cit.* n.41, pp.95-6.

⁵¹ J.B. Skjærseth, *The Mediterranean Action Plan - More Political Rhetoric than Effective Problem-Solving?*, 1992.

⁵² *Ibid*, pp.2-3.

⁵³ *Ibid*, pp.32-3.

⁵⁴ See P. Haas, *Saving the Mediterranean - The Politics of International Environmental Co-operation*, 1990, p.129; see also pp.131-154, for an overview of the progress of national activities in this context.

⁵⁵ *Ibid*, p.130.

⁵⁶ *Ibid*, pp.131-40.

where it has been accumulating since the 60s and is by far the most sophisticated system of legislative control in the region - Greece, Israel, and Egypt, with the rest of the countries lagging behind, but making substantial progress with time; national expenditures for marine pollution measures in the Mediterranean countries were also examined and resulted in a similar estimate as far as leading countries and progress are concerned.⁵⁷

However, Haas is the only one taking a favourable stance with regard to the Mediterranean states' record of compliance. The EIB/World Bank preliminary study for the Environmental Program for the Mediterranean, examined in the previous Chapter, found that whatever legislation is in place, it is not generally complied with. An important factor behind this phenomenon is the delay, once a general framework law is adopted, in issuing the necessary supplementary decrees.⁵⁸ What is more, subsidiary legislation is often unenforceable because it is "inappropriate or unaffordable" or because of lack of the necessary capacity and equipment, particularly - although not exclusively - in Southern countries;⁵⁹ enforcement agencies often do not have the capacity to enforce standards, especially in countries where the environment is not a political priority; and many countries have ineffective rules in place, such as fines that have not been adjusted to inflation. These problems appear to be particularly acute where the industry is primarily publicly owned.

The study also pointed to the fact that it has sometimes proved difficult to balance responsibilities among central, regional and local authorities.⁶⁰ In the former Yugoslavia, for instance, almost all functions were delegated to the republics and communes; in Italy, to regional and local agencies; and in France, to regional river basin authorities, the *agences financières du bassin*, having the power both to allocate the resources and to fund pollution control measures, and thus presenting an interesting model for other countries;⁶¹ while in the developing Mediterranean countries decentralisation of environmental responsibilities and assignment of relevant powers to local governments was gaining momentum.

Is there an overall conclusion that can be drawn from all these studies with regard to the initial question asked in this Section? As we already noted, it is by no means evident that a certain piece of legislation is passed as an implementing law, except when the law ratifying a convention also includes further rules that give substance to general or 'non-self-executing' provisions.⁶² It follows that how and to what extent the operation of, for instance, MAP has contributed to

⁵⁷ *Ibid*, pp.140-54.

⁵⁸ See World Bank/EIB, *The Environmental Program for the Mediterranean - Preserving a Shared Heritage and Managing a Common Resource*, 1990, pp.42-4.

⁵⁹ It is characteristic that many secondary waste water treatment facilities in the region, although designed to remove 90% of BOD, actually remove less than 70%, due to the lack of skilled technicians.

⁶⁰ World Bank/EIB, *op.cit.* n.58, p.43.

⁶¹ See, T.Lanoux, *France: Water and Waste: A Study of the Implementation of the EEC Directives*, *European Environmental Policy in Practice*, Vol.3, 1986, pp.8-9.

⁶² On the meaning of this term, see following Section.

improving marine pollution controls in the Mediterranean can only be a matter of speculation, as the possible factors that influence and determine the attitude and actions of governments and the public vary greatly from country to country and understandably evolve with time as awareness increases. In other words, a regional system of protection which imposes, among others, legal obligations interacts with a great range of variables and other regional or global legal regimes and finally contributes to enhanced legal measures and policies at the national level, directly and indirectly, as it helps raise awareness. To try and assert the level of compliance with international obligations in the region appears, thus, a rather futile exercise if it is done in such an all-encompassing way.

On the other hand, it seems more constructive to examine whether in cases of non-compliance, as they specifically arise in particular countries, there exist mechanisms to ensure proper implementation of the international standards breached. The issue examined in the following Section is, accordingly, whether, should a state not implement international rules that it has duly committed itself to, the latter can still be applicable to legal relations within that state; or in other words, what is the effect of treaty provisions in national legal orders in the Mediterranean.

7.1.3. The Position of Treaties in the National Legal Order of Mediterranean States.

International law binds states to implement it in accordance with the fundamental principle *pacta sunt servanda*,⁶³ but it is constitutional law that allows it to have a specific effect within a certain legal system. Let us, then, examine how Mediterranean Constitutions import international rules into the domestic legal system, and where they place them in the hierarchy of legal norms.

Any student of international law is bound to have come across the extensive debate generated by the two main approaches to incorporation of international law in domestic legal orders, i.e. the 'monist' and the 'dualist' approach.⁶⁴ According to the former, a treaty approved by the state and in force at the international plane automatically becomes part of the law of the land, without any separate act of 'incorporation' or 'transformation', while the latter results in a treaty having no effect *per se* and requiring transformation by a legislative act.

France is a typical example of the 'monist' system. However, according to Article 53 of the French Constitution, among others, treaties or agreements concerning international organisations; those that imply a financial commitment for the state; and those that modify provisions of a legislative character may only be ratified or approved by way of legislation. This, of course, diminishes the practical importance of the above distinction, in view of the fact that a specific legislative act is similarly needed in countries, such as Italy, which adopt a predominantly 'dualist' approach. This is usually a statute ('implementing order') providing that "full implementation is to be given to the treaty from the date it enters into force for Italy", while the actual text of the

⁶³ See Vienna Convention on the Law of Treaties, Art.27.

⁶⁴ See generally, F.G.Jacobs & S.Roberts (eds.), *The Effect of Treaties in Domestic Law*, 1987.

international agreement is reproduced in a schedule. In practice, an implementing order is always enacted whenever Parliament authorises ratification of a treaty. This is also required under Article 80 of the Constitution every time legislation needs to be modified for implementing the treaty.⁶⁵ The only real difference remaining, therefore, is that, in theory, Italian courts do not apply the treaty directly but rather the order; however, in practical terms the national judge is usually not concerned with that kind of rather legalistic distinction.

As ratification, usually by the national legislature, is the rule among Mediterranean states,⁶⁶ it is interesting to briefly consider the problem of non-ratification - or delays in this respect -. It has been suggested that "the real problem of national ratification is not opposition but indifference", although political factors or fears concerning possible repercussions of certain rules might also account for some cases of delay or failure to ratify.⁶⁷ Thus, it is often observed that ratification is expedient only when there is a motivation to endorse a particular international agreement; this phenomenon is more common in developing countries with poor administrative infrastructure, although Western Europe is by no means immune to it. In this context, clauses whereby some rules apply even before the legal entry into force of a convention, such as those found in MARPOL with regard to construction requirements, reduce the cost involved in ratification, or rather disconnect these costs from the latter. Another incentive to ratification is a provision that a convention is to be applied to all activities and persons that fall under the control or jurisdiction of a Party irrespective of the status of the instrument in the national jurisdiction of the actor.⁶⁸ Such a clause is again found in MARPOL, and implies that a state will not have any benefit if it stays out of the regime; its ships will be subject to it, while the state itself will not be able to use the rules laid down in the Convention to its own benefit.

Now, once a treaty is imported into the national legal system it is significant to know the position of the rules it establishes in relation to the rest of national legislation. A survey of modern constitutions by Professor Cassesse revealed four broad categories: those which do not say anything about the implementation of treaties; those that recognise the binding effect of treaties in the domestic legal order, but do not grant them higher status than ordinary legislation; those which

⁶⁵ See G.Gaja, 'Italy', in Jacobs & Roberts, *op.cit.* n.64, p.108.

⁶⁶ Most constitutions of the region require parliamentary ratification for at least certain categories of treaties, see, e.g., the Spanish Constitution, Article 94(1), establishing such a requirement for, among others, treaties that "imply important financial obligations, or involve modification or repeal of some law or require legislative measures for their execution"; similarly in Croatia, Article 133; Greece, Article 36(2); Israel, Article 11(4) of the 1964 Basic law; Tunisia, Article 33; Turkey, Article 90; Yugoslavia, Article 78(4); Slovenia, Article 86; Syria, Article 71(5); Albania, Article 67. Note that early Constitutions, such as the Lebanese (1947), contain rather outdated clauses, whereby the President of the Republic can negotiate and ratify treaties and even keep them secret from the Parliament (Art.52); in Monaco (1962), the Prince is entitled to issue the necessary ordinances for application of international agreements (Art.68); while in Morocco, the King is similarly empowered to sign and ratify treaties (Art.31(2)); but *cf.* the very recent (1996) Algerian Constitution, whereby the President of the Republic alone concludes and ratifies international treaties (Art. 77(9)).

⁶⁷ See R.M.M'Gonigle & M.W.Zacher, *Pollution, Politics and International Law - Tankers at Sea*, 1979, p.321.

⁶⁸ *Ibid.*, p.318.

establish the principle that treaties prevail over ordinary legislation, and consequently the legislature may not alter or supersede their provisions by enacting new law; and, finally, those exceptional cases like the Dutch Constitution which allow treaties to modify or revise constitutional provisions.⁶⁹

The Italian, Albanian, and Israeli Constitutions fall into the first group.⁷⁰ In these countries, any international instrument is usually incorporated in the form of an ordinary legislative act and ranks equal with the rest of such acts. The main shortcoming of this system, according to Professor Cassesse, is that "national authorities may easily thwart the impact of international treaties on domestic legislation by resorting to *interpretative devices* over which no constitutional control is available".⁷¹ However, despite the fact that when there is no express hierarchy of legal rules under the constitutional law of a country, the courts should normally apply the *lex posterior* rule to resolve conflicts,⁷² it is often the case that national courts - conversely - try to maintain the primacy of international rules through certain interpretative techniques. Most common among them are the presumption that domestic law conforms to international law unless the intention of the legislator to the contrary is manifest, and that the treaty rule is *lex specialis*, widely used in Italy in an effort to save international norms that have been overridden by subsequent statutes.⁷³

The Egyptian, Syrian, Turkish, and Yugoslavian Constitutions belong to the second category,⁷⁴ and present characteristics similar to the first group; whereas the Algerian, Croatian, Cypriot, French, Greek, Slovenian, Spanish and Tunisian Constitutions place treaties in higher ranking than ordinary legislation.⁷⁵ The Spanish and the Croatian Constitutions are the most advanced in this respect, as they do not impose any restrictions to the full operation of treaty rules, such as those found in the French and Greek Constitutions containing a reciprocity clause.⁷⁶ The Spanish Constitution reads:

"Article 96(1). Validly concluded international treaties once officially published in Spain shall constitute part of the internal legal order. Their provisions may only be abrogated, modified or suspended in the manner provided for in the treaties themselves or in accordance with general norms of international law."

⁶⁹ See A.Cassese, 'Modern Constitutions and International Law', 192 *Receuil des Cours*, 1985(III), pp.331-475, at Chapter III. On the application of international environmental law by Dutch courts, see A.Nollkaemper, 'Judicial Application of International Environmental Law in the Netherlands', 7(1) *R.E.C.I.E.L.*, 1998, pp.40-6.

⁷⁰ See, e.g., Article 8(1) of the 1991 Albanian Constitution providing for observance of "the principles and norms of the international law generally accepted", but remaining silent with regard to treaty rules. On the particular jurisprudence developed by the judiciary in Israel, which is in principle a monist country but does not treat conventional rules as binding law, see E.Benvenisti, 'Judicial Misgivings Regarding the Application of International Law: An Analysis of Attitudes of National Courts', 4 *Eur.J. of Int'l L.*, 1993, pp.176-83.

⁷¹ Cassesse, *op.cit.* n.69, p.397.

⁷² See, e.g., T.Scovazzi, 'Two Italian Judgments Relating to the Implementation of Environmental Conventions', *Eur.Env't L.Rev.*, November 1996, p.316, for a presentation of an Italian case where MARPOL was applied as *lex posterior*.

⁷³ Gaja, *op.cit.* n.65, pp.96-101; Conforti, *op.cit.* n.8, p.42-3 *et seq*; and Cassesse, *op.cit.* n.69, pp.398-401.

⁷⁴ Articles 151, 71, 90, and 16 respectively.

⁷⁵ Articles 123, 134, 169(3), 55, 28(1), 8, 96(1), and 32 respectively.

⁷⁶ See Cassesse, *op.cit.* n.69, pp.403 and 404-8.

Significantly, the last sentence in essence implies that not even constitutional amendments can alter international rules, once these have been incorporated into the Spanish legal order.⁷⁷

Broadly speaking, constitutional law tends to ensure municipal compliance with international norms, but, as professor Cassesse points out, it "does not tie the hands of domestic authorities...[but rather] leaves them considerable leeway in case national interests should run on a collision course with international obligations."⁷⁸ Hence, a variety of barriers to the full and adequate implementation of international law at the national level have been devised,⁷⁹ including the '*acte de gouvernement*' doctrine, whereby actions of the state executive in breach of international law are non-justiciable, extensively used by French courts;⁸⁰ the related jurisdiction of the executive over the interpretation of treaties, a practice discontinued by the French Conseil d'État only in 1990;⁸¹ the relevant anglo-saxon 'act of state' doctrine, barring judicial review of the behaviour of a foreign state;⁸² but, most significantly, the concept of 'non-self-executing' international law.⁸³

To the extent an international instrument is formally valid under municipal law, the question whether it can be directly applied by 'domestic legal operators', depends exclusively on its content.⁸⁴ One manifestation of the 'self-executing' character of an international provision is that it confers upon individuals enforceable rights and obligations; however, that is not a pre-condition for the said character to exist, as not all 'self-executing treaties' create individual rights. The decisive question is whether the agreement or some of its provisions can be relied upon by any interested person and directly applied by the executive or the judiciary, or "an intervening act of integration by a public authority is required before the agreement is applied".⁸⁵

As Professor Conforti rightly argues, in principle, 'non-self-executing' rules strictly must consist of those not creating any obligations for the state, but merely allowing for discretionary power,⁸⁶ and those which, although creating obligations, cannot be implemented due to lack of

⁷⁷ See *ibid.*, p.404.

⁷⁸ *Ibid.*, p.412.

⁷⁹ See, among others, Conforti, *op.cit.* n.8, pp.13-47; and, J.H.Jackson, 'Status of Treaties in Domestic Legal Systems: A Policy Analysis', 86 *A.J.I.L.*, 1992, pp.310-40..

⁸⁰ See Conforti, *op.cit.* n.8, pp.14-7.

⁸¹ *Ibid.*, pp.17-20.

⁸² See *ibid.*, pp.20-4, esp. at fn.38.

⁸³ *Ibid.*, pp.25-34.

⁸⁴ See Ebbesson, *op.cit.* n.4, p.59.

⁸⁵ Conforti, *op.cit.* n.8, pp.25-6.

⁸⁶ *Ibid.*, p.27. Cf. E.Somers, 'The Role of the Courts in the Enforcement of Environmental Rules', 5 *I.J.E.C.L.*, 1990, p.194, suggesting that "the bulk of international law is not self-executing"; and Ebbesson, *op.cit.* n.4, Chapter 10, who argues that although most treaties cannot be complied with solely by reliance on direct effect, and incorporation by legislation better ensures implementation, an integrative approach is desirable so that domestic courts and institutions would consider treaties as one of various legal sources in their decision-making.

necessary organs or mechanisms in the national legal system.⁸⁷ He further argues that evasion of direct application of international norms because of their 'vagueness' or 'indeterminateness', especially when they contain declarations of principles rather than specific rules, is highly questionable, as "an interpreter can draw concrete applications from any declaration of principle, however general, if only by virtue of its abrogative effect".⁸⁸ The invocation of particular dispute resolution mechanisms as grounds for not applying an international instrument, as was done by the ECJ in relation to GATT,⁸⁹ also seems unjustified. Most importantly, even a treaty's inclusion of implementation clauses, by which the parties undertake to take all necessary legislative and other measures to give effect to its provisions, cannot be a barrier to its 'self-executing' character.⁹⁰ Professor Conforti argues that such clauses only direct parties to secure the treaty's validity within their legal systems and take the necessary steps to implement it, and, at most, remain meaningful, after the instrument has taken full effect in the state, in relation to treaty norms which remain 'non-self-executing' until the organs or mechanisms necessary for their implementation are developed.

The most widely held view, however, is that, for treaty provisions to be 'self-executing' or 'directly applicable', they must be complete and precise and impose duties or confer rights to individuals.⁹¹ It has been suggested in this connection that sometimes 'the legislature desires to preserve the *option to breach* the treaty in its method of application',⁹² and hence does not endorse direct application when it lays down the relevant constitutional rules.

Another related issue is the trend to deny that binding resolutions of international organisations are 'self-executing'. Most countries take the position that they must be incorporated by an ad hoc legislative or administrative act before they can have any domestic effect. Most often, such acts are adopted by the executive upon delegation by the legislature. Still, if a treaty has acquired domestic formal validity and confers upon specific bodies the power to make binding decisions, then the binding force of those decisions flows directly from the former's own obligatory character.⁹³

All these questions, as they arise in each country, are ultimately decided by the national judiciary. The age-old debate between 'monists' and 'dualists' has lost much of its significance in

⁸⁷ See, e.g., T.Scovazzi, *op.cit.* n.72, p.315, whereby the Italian authorities adopted the necessary implementing law thirteen years after the entry into force of CITES for Italy.

⁸⁸ Conforti, *op.cit.* n.8, pp.28-9.

⁸⁹ In Cases 21 to 24/72, 1972 *E.C.R.*, p.1219; Case 9/73, 1973 *E.C.R.*, p.1135; and Cases 267 to 269 and 281/1983, 1983 *E.C.R.*, p.801.

⁹⁰ See Conforti, *op.cit.* n.8, pp.30-4. In fact, in Italian jurisprudence there are instances of direct application of certain provisions of a treaty featuring an implementation clause, see *ibid.* fn.69.

⁹¹ See *Jurisdiction of the Courts of Danzig* Advisory Opinion, 1928, *P.C.I.J.*, Series B, No.15, pp.17-8.

⁹² See Jackson, *op.cit.* n.79, p.325.

⁹³ Conforti, *op.cit.* n.8, p.35-6.

this context too;⁹⁴ in fact, in countries of dualist tradition, such as Italy, the courts have adopted an 'internationalist stance' and are ready to directly apply treaties that are not considered 'self-executing' in other states, such as the GATT,⁹⁵ while in 'monist' countries, such as France, the judiciary has a reputation for being unwilling to enforce international law against the wishes of the legislature or the executive.⁹⁶

It follows that the role of the judiciary emerges as very critical should binding treaty norms be made operative in any given jurisdiction. In fact, national courts as enforcers of international law is an idea broadly favoured by international lawyers,⁹⁷ despite the fact that "[j]udges firmly refuse to live up to the vision...";⁹⁸ in view of sensitive issues of political and economic nature leading to judicial deference to the political branches of state. In this connection, it would be fair to say that the authority of the judiciary is not as strong in other parts of the world as in Western Europe and North America;⁹⁹ in many countries it may even be considered unacceptable to leave the resolution of general legal questions and especially decisions to fill gaps in the existing legal system to courts.¹⁰⁰ The above discussion, therefore, will be of only theoretical value, if it is not accompanied by an examination of how the judiciary of a particular Mediterranean country puts constitutional provisions into effect in real life. Indeed, it is particularly instructive to look at the practice of courts in a 'monist' system, where, moreover, international law ranks higher than domestic legislation, such as Greece. It should be noted, however, that the following case study is only an example, an illustration of the previous points, and does not allow for general conclusions to be drawn, as it is not claimed that it is representative of all or some of the Mediterranean states.

7.1.4. Judicial Application of International Environmental Law in Greece - A Case Study.

On a close look, it immediately becomes evident that Greek courts are overwhelmingly concerned with the application of exclusively national laws, even in cases where international treaty rules are *prima facie* applicable. The former may well be said to implement the latter, but the fact

⁹⁴ *Ibid*, pp.13 and 26; and F.G.Jacobs, 'Introduction', in Jacobs & Roberts (eds.), *op.cit.* n.64, pp.xxiv-xxvi.

⁹⁵ See Conforti, *op.cit.* n.8, fn.54 and 62; and Gaja, *op.cit.* n.65, p.104.

⁹⁶ See J.D.de la Rochère, 'France', in Jacobs & Roberts (eds.), *op.cit.* n.64, pp.39-61. In practice, the French administrative judge - as opposed to the judicial courts which demonstrate a more open attitude - sets treaty and legislation on the same level, despite the constitutional provision; when a conflict arises, he gives precedence to the most recent rule. However, he does admit applications to annul administrative acts for violation of treaties.

⁹⁷ See, among others, Benvenisti, *op.cit.* n.70, pp.159-183, esp. at fn.3 for a review of relevant literature.

⁹⁸ *Ibid*, p.161.

⁹⁹ On the problem of non-independent judiciary in developing countries see, among others, M.G.Faure, *Enforcement Issues for Environmental Legislation in Developing Countries*, Maastricht: UNU/INTECH, Working Paper No.19, March 1995, p.16.

¹⁰⁰ Somers, *op.cit.* n.86, p.193.

remains that the Greek judge, despite an explicit constitutional mandate to enforce international treaty law applicable in the country, regularly fails to embark into any relevant consideration.

Accordingly, decisions of Greek courts regarding imposition of administrative fines for marine pollution from land-based, and more specifically industrial, activities are commonly based on Law 743/1977 regarding protection of the marine environment and regulation of related issues (as amended by Law 1147/1981),¹⁰¹ while most recent ones additionally apply the 'framework' Law 1560/1986 concerning protection of the environment.¹⁰² This is to a certain extent justified both by the understandable familiarity of the national judge to his domestic legislation, and by the fact that the said laws partially implement international prescriptions on their subject-matter.

However, in the context of marine pollution from ships, one comes across some notable exceptions to this pattern of evading direct application of international norms in preference for domestic legislation. Hence, although cases concerning marine pollution from ships are also regularly decided under Law 743/1977,¹⁰³ there are some instances where international treaties have been found to lay down the applicable law, even in the face of conflicting national standards. One such judgment was awarded by the Three-Member Administrative Court of Appeal of Thessaloniki in 1990,¹⁰⁴ upholding the fine imposed on a non-Party ship, upon its entering into a Greek port, for pollution committed outside the territorial sea of Greece, in accordance with MARPOL (Art.5(4)). In this case, the Court of Appeal embarked into a constructive reading of the Convention, together with the ratifying statute, and importantly considered the said Article 'self-executing' rejecting an argument to the effect that it required further implementing legislation in order to acquire full effect in the country. The second example is equally significant: Pursuant to Decision 1759/1991 of the Multi-Member Court of First Instance of Pireas,¹⁰⁵ the standard of strict liability for oil pollution

¹⁰¹ See, e.g., civil cases: Multi-Member Court of First Instance of Athens, Decision No.14598/1982, *Ελληνική Δικαιοσύνη* [Greek Justice], Vol.25, 1984, p.388; One-Member Court of First Instance of Nauplion, No. 163/1991, *Επιθεώρηση Εμπορικού Δικαίου* [Review of Commercial Law], Vol.μβ, 1991, p.628. From the case law of administrative courts, see Three-Member Administrative Court of Appeal of Athens, No.36/1987, *Επιθεώρηση Ναυτιλιακού Δικαίου* [Review of Maritime Law], Vol.16, 1988, p.30; Council of State decisions No.1029/1987, *Διοικητική Δίκη* [Administrative Trial], Vol.1, 1989, p.473; No. 1124/1988, *Διοικητική Δίκη* [Administrative Trial], Vol.1, 1989, p.474; No.62/1992, *Διοικητική Δίκη* [Administrative Trial], Vol.Η, 1992, p.1208; No.865/1993, *Φορολογικό Βήμα* [Tax Tribune], Vol.8, 1994, p.175; and No.1177/1994, unreported. On marine pollution from urban wastewater, see Council of State, Decision No.3154/1993, unreported. For penal proceedings for land-based marine pollution under Law 743/1977, see Council of the Supreme Court, Decision No.807/1989, *Ποινικά Χρονικά* [Penal Chronicles], Vol.Μ, 1990, p.174.

¹⁰² See, e.g., Three-Member Administrative Court of First Instance of Thessaloniki, Decision No.323/1992, *Διοικητική Δίκη* [Administrative Trial], Vol.6, 1994, p.204.

¹⁰³ See, e.g., Council of State, Decision No.220/1987, *Επιθεώρηση Ναυτιλιακού Δικαίου* [Review of Maritime Law], Vol.16, 1988, p.29; and Nos.2952/1990 and 3720/1990, *Επιθεώρηση Δημοσίου Διοικητικού Δικαίου* [Review of Public Administrative Law], Vol.35, 1991, p.298; Three-Member Administrative Court of First Instance of Pireas, Decision No.2/1993, *Διοικητική Δίκη* [Administrative Trial], Vol.6, 1994, p.396; Three-Member Administrative Court of Appeal of Pireas, Decision No.138/1993, *Επιθεώρηση Ναυτιλιακού Δικαίου* [Review of Maritime Law], Vol.21, 1993, p.343; and Council of State, Decision No.674/1994, unreported.

¹⁰⁴ Decision No.616/90, *Επιθεώρηση Δημοσίου Διοικητικού Δικαίου* [Review of Public Administrative Law], Vol.35, 1991, p.611.

¹⁰⁵ *Επιθεώρηση Εμπορικού Δικαίου* [Review of Commercial Law], Vol.μβ, 1991, p.686.

enshrined in the 1969 Civil Liability Convention overrides ordinary national law requiring responsibility on the basis of fault.

Moreover, during the 80s, the Greek Council of State started producing a very significant body of jurisprudence,¹⁰⁶ which matured in the 90s when increased environmental awareness brought many citizens and NGOs before the courts in challenge of acts allowing further degradation of the environment and their quality of life. This phenomenon acquires additional significance in view of the fact that other state organs in the country do not show the same awareness and willingness to apply and enforce environmental legislation.¹⁰⁷

The Council of State has, in this context, endorsed several principles central to international environmental law-making and turned them into fundamental tenets of the Greek legal order without waiting for their formal endorsement by the legislature. What it has actually done is to constructively interpret national legislation and the Constitution in the light of international legal developments, including soft law. In this context, the Court has upheld, among others, the principle of sustainable development; the principle of prevention; and a truly radical doctrine, whereby legislative changes introducing provisions less favourable to environmental protection as compared with pre-existing legislation are prohibited.¹⁰⁸

The Council has also recently had the opportunity to produce a considerable body of case-law in which specific treaties, such as the 1979 Berne Convention on the Conservation of European Wildlife and Natural Habitats - usually concurrently with Directive 79/409 on conservation of wild birds -, are meticulously applied. The first chance to do so was presented in 1993, when the Court found that a Ministerial Decision on permitted hunting of certain wild species did not fulfill the requirements of the Berne Convention, as it was not premised on a comprehensive scientific study pertaining to the population of each species concerned and the impact of the envisaged hunting activity on them.¹⁰⁹ In the same vein, the Berne Convention has been relied upon in order to uphold a Presidential Decree imposing restrictions on property rights in and around the breeding grounds

¹⁰⁶ And especially its Fifth Division which is assigned with environmental cases, and has, during the last fifteen years, built a strong reputation for being a staunch supporter of environmental causes.

¹⁰⁷ See K.Μενουδάκος, 'Προστασία του Περιβάλλοντος στο Ελληνικό Δημόσιο Δίκαιο. Η Συμβολή της Νομολογίας του Συμβουλίου της Επικρατείας' [K.Μenoudakos, 'Protection of the Environment in Greek Public Law. The Contribution of the Jurisprudence of the Council of State'], *Νόμος και Φύση* [Law and Nature], Vol.4(1), 1997, pp.20-1.

¹⁰⁸ See Decisions No.5267/1995, unreported; 53/1993, and 1520/1993, *Νόμος και Φύση* [Law and Nature], Vol.1, 1994, pp.290 and 209 respectively; 10/1988, unreported; 185/1995, unreported; and 2242/1994 concerning urban planning, *Νόμος και Φύση* [Law and Nature], Vol.2(1), 1995, p.121. In Decision No.253/1996, *Το Σύνταγμα* [The Constitution], Vol.22, 1996, p.1066, it notably went as far as interpreting the Constitution in the light of Agenda 21 with regard to principles that should govern coastal development.

¹⁰⁹ Council of State, Decision No.366/1993, *Το Σύνταγμα* [The Constitution], Vol.20, 1004, p.157. Note that the Court subsequently had a chance to review the quality of the scientific study ordered in the above Decision, and still found it inadequate, see Decision No.1174/1994, unreported.

of the sea turtle (*caretta caretta*);¹¹⁰ and of the Mediterranean monk seal (*monachus monachus*).¹¹¹ Moreover, in Decisions 2343/87 and 1342/92, the Council of State applied the Ramsar Convention on Wetlands of International Importance in concrete cases overcoming the lack of precise delimitation of the protected areas involved, setting aside national provisions allowing for exceptions to the system of protection established by the international instrument, and finding at least the prohibitive content of relevant international law - i.e. the prohibition of any act degrading or destroying protected wetlands - directly applicable.

Finally, special reference should be made to Decision 2301/1995, which is an outstanding piece of commendable judicial application of international law for an additional reason:¹¹² In this instance, the Council of State considered the applicability of the 1979 Bonn Convention on the Conservation of Migratory Species of Wild Animals, an instrument not ratified by Greece. It eventually found that it is in fact binding and applicable by virtue of Council Decision 82/461, whereby the Community as such acceded to the Convention. The Council invoked relevant case law of the ECJ in support of the conclusion that an international agreement duly entered into by the EC forms an integral part of the Community legal order,¹¹³ and may, in principle, be 'directly applicable' in Greece in view of its wording, nature and subject-matter entailing clear and precise obligations not being conditional on any implementing act.¹¹⁴

7.2. Implementation of Community Environmental Law in Mediterranean Member States.

Let us now consider the distinct concepts of the Community legal order that relate to application of rules of international origin in domestic jurisdictions, and see how they differ from what we have seen so far.

As early as 1963, the ECJ described the Community as "a new legal order of international law",¹¹⁵ and formulated the doctrine of 'supremacy of Community law' declaring that

"... by creating a Community of unlimited duration, having its own institutions, its own personality... and, more particularly, real powers stemming from a limitation of sovereignty or a transfer of powers from the states to the Community, the Member States have limited

¹¹⁰ See Council of State, Decisions Nos.1821/1995, *Νόμος και Φύση* [Law and Nature], Vol.3(1), 1996, p.149; and 4950 to 4953/1995, unreported.

¹¹¹ Council of State, Decision No.2304/1995, *Νόμος και Φύση* [Law and Nature], Vol.3(1), 1996, p.176.

¹¹² Council of State, Decision No.2301/1995, *Νόμος και Φύση* [Law and Nature], Vol.3(1), 1996, p.162.

¹¹³ See Cases 12/86, *Demirel*, 1987 *E.C.R.*, p.3719; and 181/73, *Hacgeman*, 1974 *E.C.R.*, p.449.

¹¹⁴ Although, eventually, the said convention was found not directly applicable in the specific circumstances, as the sea turtle is listed under Annex II, thus requiring further governmental action for its effective protection. On the 'direct applicability' of international instruments in Community law, see also *infra*, p.322.

¹¹⁵ Case 26/62, *Van Gend en Loos v. Netherlands Fiscal Administration*, 1963 *E.C.R.*, p.1.

their sovereign rights, albeit within limited fields, and have thus created a body of law which binds their nationals and themselves.”¹¹⁶

This provides the underlying rationale for the idea that, once a Community legislative act is issued, Member States need not - in fact, they are not allowed to - ‘incorporate’ it in the domestic legal domain, unless such legislative action is required by the act itself. This is the first fundamental characteristic distinguishing the Community legal order from the international one, and is importantly coupled with the principle that all national law - including constitutional rules - is inapplicable if in conflict with the EEC Treaty or ‘directly applicable’ secondary provisions.

More specifically, Regulations which are the principal legislative texts of the Community order are binding and directly applicable in all Member States (Art.249); implementing national legislation is not normally required nor permitted.¹¹⁷ As a Regulation is a *lex perfecta*,¹¹⁸ it creates rights and obligations for both States (‘vertical effect’) and their nationals (‘horizontal effect’). All domestic laws contrary to it or even “encroaching upon the field within which the Community exercises its legislative power” are inapplicable,¹¹⁹ and furthermore, there seems to exist a positive obligation to repeal conflicting national provisions.¹²⁰

A Directive, on the other hand, which is the type of instrument overwhelmingly used in the environmental context, is binding as to the result to be achieved upon each Member State to which it is addressed, but leaves to the national authorities the choice of forms and methods (Art.249). Member States have to modify national legislation accordingly and to guarantee that the Directive is enforced. More specifically, the instrument has to be formally implemented within a specified time limit, i.e. to be transposed into national law and be given full effect (*effet utile*),¹²¹ either through adoption of a new parliamentary act, if existing legislation is inadequate, or through introduction of new administrative regulations based on existing statutory authority, or even new administrative

¹¹⁶ Case 6/64, *Costa v. ENEL*, 1964 E.C.R., p.585.

¹¹⁷ See Generally, T.C.Hartley, *The Foundations of European Community Law*, 4th ed., 1998, p.198.

¹¹⁸ It should be noted, however, that the sometimes poor quality and often complex and technical character of Community legislation, in general, have caused concern which led to the adoption of a number of criteria that should be checked during drafting, namely that the wording of the act is clear, simple, concise and unambiguous; that the various provisions are consistent with each other and, to the extent possible, with existing legislation; that the rights and obligations of those to whom the act is to apply are clearly defined; that provisions without legislative character are avoided etc., see Council Resolution of 8 June 1993, 1993 O.J. (C 166) 1.

¹¹⁹ Case 106/77, *Simmenthal*, 1978 E.C.R., p.629.

¹²⁰ Case 167/73, *Commission v. France*, 1974 E.C.R., p.359. This doctrine might seem fairly straightforward but it has met with some resistance in certain Member States; in Italy, for instance, Regulations were not considered directly applicable for a long time - i.e. at least until 1984 - and required an *ad hoc* incorporation act, see A.la Pergola & P.del Duca, ‘Community Law, International Law and the Italian Constitution’, 79 *A.J.I.L.*, 1985, pp.598-621; Conforti, *op.cit.* n.8, pp.38-9; and Gaja, *op.cit.* n.65, pp.91-2.

¹²¹ Case 48/75, *Jean Noel Royer*, 1976 E.C.R., p.516; and see generally, S.Prechal, *Directives in European Community Law*, 1995, Part I; and J.H.Jans, *European Environmental Law*, 1995, pp.119-41.

practices through circulars, should the existing framework permit it.¹²² The last point needs a further qualification: “[M]ere administrative practices, which by their nature can be changed as and when the authorities please and which are not publicized widely enough” do not constitute proper transposition.¹²³

Respecting the deadline for implementation is not, according to the ECJ, a mere formality, but rather an essential element of the Community legal order;¹²⁴ when it lacks, there is an undesirable discrepancy in Member States’ laws after the deadline expires. That is why arguments in defence of non-timely transposition of Community law, such as that the time allowed for implementation is insufficient;¹²⁵ that other Member States had failed to implement a Directive within the fixed time-limit;¹²⁶ and that internal difficulties,¹²⁷ including constitutional provisions,¹²⁸ the premature dissolution of the national legislature,¹²⁹ governmental crises,¹³⁰ or other circumstances, have prevented timely implementation,¹³¹ have all been rejected.

Generally speaking, the crucial issue is not one of form, but rather of whether the specific transposition vests the Community rule with binding force; it has to happen in a way that “fully meets the requirements of clarity and certainty in legal situations”,¹³² and “...must consequently transpose their terms into national law as binding provisions”.¹³³ Therefore, the legislative instrument that implements a Directive has to be of the same legal status as previous regulation of the subject-matter so as to ensure that the former will substitute the latter as *lex posterior*.¹³⁴ Under the same rationale, a State may not simply attribute ‘direct effect’ to the provisions of a Directive,¹³⁵ and thus avoid normal transposition, nor can it invoke the fact that current practice within the State conforms with the Directive.¹³⁶ The ECJ has additionally held that partial application of a Directive does not

¹²² Similarly, “general principles of constitutional or administrative law” may render specific legislation on a certain subject superfluous, see, among others, Case 29/84, Commission v. Germany, 1985 E.C.R., p.1661.

¹²³ Case 102/79, Commission v. Belgium, 1980 E.C.R., p.1486.

¹²⁴ See Case 52/75, Commission v. Italy, 1976 E.C.R., p.284.

¹²⁵ See *ibid*, p.277.

¹²⁶ Case C-38/89, Blangueron, 1990 E.C.R., p.I-2567.

¹²⁷ Case 77/69, Commission v. Belgium, 1970 E.C.R., p.1237.

¹²⁸ Case 102/79, *loc.cit.* n.123, p.1487.

¹²⁹ Case 79/72, Commission v. Italy, 1973 E.C.R., p.671.

¹³⁰ Case C-38/89, *loc.cit.* n.126.

¹³¹ See, among others, Case 52/75, *loc.cit.* n.124, p.285.

¹³² Case 96/81, Commission v. Netherlands, 1982 E.C.R., p.1804.

¹³³ Case 239/85, Commission v. Belgium, 1986 E.C.R., p.3645.

¹³⁴ Case 102/79, *loc.cit.* n.123, p.1473.

¹³⁵ See *infra*, pp.322 *et seq.*

¹³⁶ See Case 102/79, *loc.cit.* n.123, at p.1484.

relieve a state from its duty; not even the fact that a specific problem on which the Directive has bearing is not intense in the country is a good defense for not fully applying the instrument.¹³⁷

Practical and effective implementation is also required and usually involves designating 'competent authorities';¹³⁸ establishing procedures and setting standards; monitoring and gathering information; establishing sanctions for non compliance; or even making investments to ensure that the desired results will be achieved. A note must be made at this point in relation to administrative regulations, most commonly taking the form of circulars. Although, as already observed, these instruments are not, in principle, appropriate to give formal effect to Community Directives, they, nevertheless, often constitute an indispensable step in the process of application of Community rules in real terms, as they contain instructions to and arrangements for various branches of the national Administration, necessary if the latter's behaviour is to conform with these rules and if actions that will give practical effect to them are to be initiated. Hence, in some instances, these instruments become the single more important factor for the effective application of Community law in a Member State.¹³⁹ At the same time, exactly because of their importance, they have the potential of bringing new elements or imposing supplementary conditions, and thus altering the substance of a Community rule in a way that cannot be readily controlled by the competent Community organs.¹⁴⁰

It is important to realise in this context that even the *verbatim* incorporation of the text of a Directive into national legislation may still constitute improper transposition if not in form at least in substance, as, in the Commission's words, "this practice may fail to respect the context of the host legal system and the capacity of the existing administrative structure to implement and apply the resultant obligations", which leads to domestic provisions being turned into a pure formality.¹⁴¹ It follows that the Commission examines, to the extent possible, all the relevant factors with a view to ascertaining that all the objectives of Community law are achieved.

All said, and despite this well-developed body of authoritative jurisprudence that is supposed to inform the actions of Member States, it is a widely acknowledged reality in the Community, that this type of instrument is not likely to be implemented accurately and in time; this phenomenon is particularly pronounced with regard to environmental Directives.¹⁴² The Commission has even gone as far as asserting that the mandatory character of the latter is not always recognised,

¹³⁷ Joint Cases C-361/88, *Commission v. Germany*, 1991 *E.C.R.*, p.2567; and C-59/89, 1991 *E.C.R.*, p.2607.

¹³⁸ In fact, the power to implement a Directive can be delegated to regional or local authorities, in accordance with the Member State's legal system, see Case 97/81, *Commission v. Netherlands*, 1982 *E.C.R.*, p.1819.

¹³⁹ See V.Constantinesco, 'France: Sunthèse Nationale', in G.C.Azzi & J.de Bry (eds.), *L'Application du Droit Communautaire par les États-Membres*, 1985, p.51.

¹⁴⁰ See *supra*, Chapter 5, pp.231-5.

¹⁴¹ See EC Commission, *Tenth Annual Report on Monitoring the Application of Community Law*, COM(93) 320 final, 28 April 1993, p.98.

¹⁴² See, e.g., the Dublin Council's call for full implementation and enforcement of environmental Directives in Member States in order to increase the effectiveness of Community environmental legislation, EC Council, European Declaration on the Environmental Imperative, *EC Bull.*, No.6, 1990, p.7.

and that "in practice directives are commonly regarded as mere recommendations".¹⁴³ The overall relevant record of Mediterranean states is indeed one of the worst in the Community, as will be shown in the next Section.

7.2.1. Implementation of Environmental Directives in Mediterranean Member States.

Broadly speaking, although Member States do not as a rule refrain from eventually transposing most of the obligations contained in environmental Directives, it is quite common not to do so in the prescribed time-frame. Delays in transposition in Mediterranean countries are equally common place.¹⁴⁴ In the environmental section of the annual Commission reports on the implementation of Community law, Greece and Italy have been typically urged to "do better".¹⁴⁵ In fact, transposition of environmental Directives in Italy has been the slowest in the Community; thus, by the end of 1994, Italy had notified implementing measures for 76% of the instruments falling due by that date, while France had a record of 94%, Greece 85%, and Spain 86% (just below the overall average of 89%).¹⁴⁶

Having said that, since 1992, Italy has introduced a new procedure, known as the 'Community Law', which has allowed a large number of Directives to be implemented, some of which were more than a decade behind time.¹⁴⁷ One should bear in mind that the Italian legal system presents a feature that complicates the situation: The regions in this country enjoy legislative powers in relation to the transposal of environmental Directives,¹⁴⁸ but the Commission is not notified of regional legislation.¹⁴⁹ Consequently, it cannot be clear to what extent the central government ensure that this type of transposition is carried out as it should.

But also in France, problems leading to late transposition of the water Directives, at least as exposed in a 1986 study, related either to prolonged consultations with very many national bodies in view of the great number of competent authorities in related matters, or with a sense on the part of the French Administration that there was no pressing necessity to comply with the timetable set

¹⁴³ See EC Commission, *op.cit.* n. 141, p.96.

¹⁴⁴ See EC Commission, *Eleventh Annual Report on Monitoring the Application of Community Law*, COM(94) 500 final, 29 March 1994, p.77. Notably, by the end of 1993, no Member State had complied with the obligation to adopt and notify programmes to reduce pollution of the aquatic environment by discharges of dangerous substances (Dir.76/464, Art.7), see *ibid.*, p.78.

¹⁴⁵ See EC Commission, *Eleventh...*, *op.cit.* n.144, p.83.

¹⁴⁶ See EC Commission, *Twelfth Annual Report on Monitoring the Application of Community Law (1994)*, COM(95) 500 final, p.72. By the end of this year, from the four Mediterranean Member States only France was in the process of transposing the urban waste waters Directive, see *ibid.*, p.66. However, by the end of 1997 the overall situation had visibly improved with France having transposed 96% of the Directives applicable on that date, Greece 97%, Italy 97%, and Spain 99%, see EC Commission, *First Annual Survey on the implementation and enforcement of Community environmental law, October 1996 to December 1997*, SEC 1999/592, 27.4.1999, p.66.

¹⁴⁷ See EC Commission, *op.cit.* n.141, p.97.

¹⁴⁸ See P.Cologgi, 'Italie', in Azzi & de Bry, *op.cit.* n.139, pp.165-70.

¹⁴⁹ See EC Commission, *op.cit.* n.141, p.123.

by the Community instrument,¹⁵⁰ the latter being a demonstration of a conception of sovereignty and resistance to change characteristic of the French Administration.¹⁵¹

In Greece, as well, the fragmentation of competence between various public bodies leads to mechanisms of environmental protection being ineffective,¹⁵² although this phenomenon is not strictly related to Community environmental rules but runs through the whole body of national environmental legislation. It is characteristic of the overall situation that pollution of marine waters falls under the jurisdiction of the Ministry of Merchant Marine, the control of polluting installations under that of the Ministry of Industry, issues of urban sewage and waste are dealt with by the Ministry of the Interior, and fishing is supervised by the Ministry of Agriculture, while all these competences operate alongside the comprehensive responsibilities of the Ministry of the Environment, and the decentralised powers of local and regional authorities. If that is a rather widespread phenomenon in Europe and beyond, in Greece it is aggravated by the unstable status of the administrative structures and the respective division of functions, which often leads to open competition among various departments and efforts at undermining each other's authority.¹⁵³

But the main malfunction of the Greek system of transposition of environmental Directives consists in the practice of ministerial decisions performing this function, in circumvention of the proper procedure which requires presidential decrees, i.e. normative acts of higher ranking. This phenomenon, which has lately acquired alarming dimensions, has the important repercussion that the instruments implementing Community environmental rules escape proper prior elaboration by the Council of State and control of legality by the President of the Republic, which in turn lead to an often poor quality.¹⁵⁴ Other problems observed so far include what is commonly called in Greek legal jargon 'spurious' transposition, i.e. incorporation of a Community environmental rule in an instrument using a purely domestic legal basis, and thus obscuring the former's origin with potential implications when it comes to enforcement thereof; incorrect transposition; as well as transposition in a fragmentary or non-systematic way.¹⁵⁵

In fact, the quality of transposition and the application of the norms contained therein present an even bigger cause for concern in all Mediterranean countries than respecting the deadlines

¹⁵⁰ See Lanoux, *op.cit.* n.61, pp.100-1.

¹⁵¹ See Constantinesco, *op.cit.* n.139, pp.55-7.

¹⁵² See Ν.-Κ.Χλέπας, 'Η Εφαρμογή του Κοινοτικού Δικαίου περιβάλλοντος από την Ελληνική Διοίκηση και η Αξιοποίηση των Κανόνων του στη Βουλή' [Ν.-Κ.Ηlepas, 'The Application of Community Environmental Law by the Greek Administration and the Invocation of its Rules at the Parliament'], in Γ.Παπαδημητρίου (επ.), *Η Διείσδυση του Κοινοτικού Δικαίου Περιβάλλοντος στην Ελλάδα*, Αθήνα: Α.Σάκκουλας [G.Papadimitriou (ed.), *The Infusion of Community Environmental Law in Greece*, Athens: Sakkoulas], 1994, pp.164-7.

¹⁵³ See *ibid.*, p.166.

¹⁵⁴ See Γ.Παπαδημητρίου, *Η Διαδικασία Προσαρμογής του Ελληνικού προς το Κοινοτικό Δίκαιο Περιβάλλοντος* [G.Papadimitriou, 'The Process of Adaptation of the Greek to the Community Environmental Law'], in Papadimitriou, *op.cit.* n.150, pp.73-9.

¹⁵⁵ See EC Commission, *op.cit.* n.141, p.71, whereby the Commission was in 1993 pursuing bilateral talks with the Greek authorities with a view to resolving the difficulties responsible for improper transposition.

for implementation.¹⁵⁶ The example of Greece again illustrates the severe weaknesses that emerge when one examines actual implementation of Community environmental rules once incorporated into the national legal order. There are instances, for example with regard to the management of solid wastes regulated in Directives 75/442 and 78/319,¹⁵⁷ where, despite formal adoption of legislation, which sets even more stringent standards than the Community minimum requirements, the actual day-to-day business is conducted without this legislation exerting any visible influence.¹⁵⁸ The main reasons that have been positively identified as accounting for this phenomenon are lack of resources and infrastructure, inability of the Administration to put into effective use the considerable human resources of the country, and last but not least the power that rests in the hands of local lobbies which typically react when the 'development' of their region is jeopardised by the application of environmental protection measures, what could be described in more subtle terms as low environmental awareness.¹⁵⁹ This 'real-life' aspect of the law is unfortunately the most difficult to follow up and evaluate in a comprehensive way, not only in Greece but in all Member States.¹⁶⁰

One could rightly conclude, then, that the everyday practical application of environmental Directives is not and cannot be monitored by the central mechanism of compliance control under Article 226. This mechanism operates only against central governments, whereas implementation involves a large number of people throughout the Member States, which can be effectively monitored only by national authorities,¹⁶¹ and, in any case, the Commission is both geographically remote and ill-equipped to conduct investigations on legal and factual aspects of individual cases of non-compliance that come to its notice.¹⁶² Moreover, the Community central judicial enforcement system cannot take into account the legal and administrative structures at various levels within Member States where environmental rules are applied.¹⁶³ The Commission shares those beliefs and has proposed that the Council recommends some minimum criteria regarding the organisation, execution, monitoring and publications of environmental inspections in order to assist Member

¹⁵⁶ At the end of 1994, for instance, Italy had several infringement procedures pending against it with regard to waters Directives, while such proceedings were under way against Spain and Greece for failure to notify programmes for the reduction of water pollution under Directive 76/446, see EC Commission, Twelfth..., *op.cit.* n.146, p.67; and *supra* Chapter 5, pp.233-4.

¹⁵⁷ On this issue, see M.Ασημακοπούλου, 'Η Προσαρμογή της Ελληνικής Νομοθεσίας στον Τομέα των Αποβλήτων' (M.Αsimakopoulou, 'The Adaptation of Greek Legislation in the Waste Sector'), in Papadimitriou, *op.cit.* n.152, pp.81-90. The dumping of such waste in a gully in Crete has led to an ECJ judgment against Greece, see Case C-45/1991, 1992 *E.C.R.*, p.I-2509.

¹⁵⁸ Waste management is actually one of the weakest sectors of environmental protection in Greece which - directly or indirectly - results in the accumulation with time of massive quantities of pollutants in the marine environment, see EC Commission, *op.cit.* n.141, p.114.

¹⁵⁹ See Hlepas, *op.cit.* n.152, pp.169-70.

¹⁶⁰ See EC Commission, *op.cit.* n.141, p.96, where various reports and declarations by Community institutions, such as the EP, the Council and the Court of Auditors, as well as institutions of the Member States, calling for "a substantial boost to the practical effect given to Community legislation", are cited.

¹⁶¹ But *cf.* European Parliament proposals for a Community coastguard in 1978 *O.J.* (C 63) 28 and (C 108) 59.

¹⁶² See EC Commission, First..., *op.cit.* n.146, p.43.

¹⁶³ See EC Commission, *Implementing Community Environmental Law*, COM(96) 500 final, 22.10.1996, p.5.

States in carrying on relevant tasks, and thereby reduce the wide disparity in the quality and form of inspections.¹⁶⁴ The proposal was based on a paper on Minimum Criteria for Environmental Inspections produced in 1997 by the informal Network for the Implementation and Enforcement of Environmental Law (IMPEL).¹⁶⁵

IMPEL was established in 1992 as the 'Chester network' of national environmental agencies and was later modified according to the Fifth Environmental Action Programme in its present form. Its mandate is to promote the exchange of information and experience and the development of a greater consistency of approach in the implementation of environmental legislation, and consider relevant questions, including ways to ensure better enforcement by national, regional, and local bodies, and thus improve co-operation and co-ordination between various enforcement agencies.¹⁶⁶ IMPEL is currently working, among others, on two studies on access to justice and access to environmental information, and on a project on environmental enforcement practices in Member States.¹⁶⁷

These last points highlight the significance of decentralised enforcement at the level of each Member State providing a crucial complement to the enforcement at Community level.¹⁶⁸ To quote Professor Macrory,

"Full implementation of Community law... is unlikely ever to be achieved solely by the "top-down" mechanism implicit in the Article 169 [226] procedure. In the long run, it requires a genuine *internal* political will by Member States..., and this in turn demands both the dynamic participation of citizens and amenity groups, and an active recognition by national courts and authorities of their own role in giving effect to Community obligations."¹⁶⁹

7.2.2. Enforcement of Community Environmental Law at the Member-State Level.

In fact, in the context of the Community legal order, certain domestic actors, namely concerned individuals and the judiciary, have much more scope and real power to take

¹⁶⁴ See EU Council, Resolution of 7 October 1997 on the drafting, implementation and enforcement of Community environmental law, 1997 *O.J.* (C 321) 1, at para.17; and EC Commission, Proposal for a Council Recommendation providing for minimum criteria applicable to environmental inspections in the Member States, COM(98) 772 final; amended in COM(99) 652 final. The Commission is even considering the need for a limited Community body with auditing competencies, and is also concerned with the development of horizontal measures such as telematic networks or training related to the application and enforcement of environmental legislation in the framework of LIFE II, EC Commission, *op.cit.* n.163, p.22.

¹⁶⁵ See IMPEL, Minimum Criteria for Environmental Inspections, BU5 4/48; and IMPEL Network, *IMPEL Reference Book for Environmental Inspections*, Nijmegen, 1999.

¹⁶⁶ See EC Commission, *op.cit.* n.163, pp.18-20. It is likely that in the future the scope of its mandate will be broadened, see EU Council, *op.cit.* n.164, at para.21.

¹⁶⁷ See IMPEL Network, *Complaint Procedures and Access to Justice for Citizens and NGOs in the Field of the Environment within the European Union*, Final Report, May 2000.

¹⁶⁸ See Prechal, *op.cit.* n.121, p.8.

¹⁶⁹ R.Macrory, 'The Enforcement of Community Environmental Laws: Some Critical Issues', 29 *C.M.L.Rev.*, 1992, pp.368-9.

implementation of the law in their hands, especially when compared to the situation in general international law as described above.

The first substantive improvement lies in a notion analogous to that of 'self-executing' provisions, namely that Community rules may be 'directly effective'. More specifically, the ECJ has developed the doctrine of 'direct effect' pursuant to which, after the prescribed time limit for transposition has expired, Directives imposing sufficiently precise, clear and unconditional obligations, not requiring further state action, may give rise to rights and obligations that individuals can rely upon when resorting to their national courts, while a Member State may not rely on its failure to perform obligations which a Directive entails.¹⁷⁰ Accordingly, individuals and NGOs may enforce 'directly effective' provisions of Directives after the deadline for implementation has passed - at that stage Directives have no differences from Regulations in the effects they produce, except in relation to the so called 'horizontal direct effect' discussed below - by bringing actions against Member States, and emanations thereof,¹⁷¹ including the judiciary,¹⁷² before national courts,¹⁷³ and even awarded damages.¹⁷⁴

An international agreement binding on the Community may also have 'direct effect',¹⁷⁵ and may be the subject of an Article 234 reference for a preliminary ruling.¹⁷⁶ However, the doctrine does not apply unqualified in such cases: In its early jurisprudence, the Court has insisted on the existence of 'direct effect' of treaty provisions in the sense of conferring rights on individuals in order to review the validity of a Community act allegedly in contravention to an international undertaking.¹⁷⁷ However, this line was later abandoned and the Court reviewed the validity of

¹⁷⁰ Case 26/62, *loc.cit.* n.115; Case 41/74, *Van Duyn v. Home Office*, 1974 *E.C.R.*, p.1337; Case 148/78, *Pubblico Ministero v. Tullio Ratti*, 1979 *E.C.R.*, p.1629. Judge Pescatore has summed up the relevant criteria suggesting that the ultimate test for direct effect of a rule laid down in a Directive is the 'justiciability' of the issues involved, see P.Pescatore, 'The Doctrine of "Direct Effect": An Infant Disease of Community Law', 8 *Eur.L.Rev.*, pp.174-7. See generally Hartley, *op.cit.* n.117, Chapter 7; and on the complex practical and theoretical problems that arise when applying the doctrine to Directives, among others, Prechal, *op.cit.* n.121, Chapter 11; N.Green, 'Directives, Equity and the Protection of Individual Rights', 9 *Eur.L.Rev.*, 1984, pp.295-325. On the 'direct effect' of EC environmental law, see J.H.Jans, 'Legal Protection in European Environmental Law', in H.Somsen (ed.), *Protecting the European Environment - Enforcing EC Environmental Law*, 1996, pp.49-98; L.Krämer, 'Direct Effect of EC Environmental Law', in *ibid*, pp.99-150; and J.H.Jans, *European Environmental Law*, 1995, Ch.IV(1).

¹⁷¹ Case 188/89, *Foster v. British Gas*, 1990 *E.C.R.*, p.I-3313.

¹⁷² Case 14/83, *Von Colson and Kamann v. Land Nordrhein-Westfalen*, 1984 *E.C.R.*, p. 1891.

¹⁷³ Case 152/84, *Marshall v. Southampton Health Authority*, 1986 *E.C.R.*, p.723.

¹⁷⁴ See *infra*, p.326-7.

¹⁷⁵ See Case 104/81, *Kupferberg*, 1982 *E.C.R.*, p.3641; Case 87/75, *Bresciani*, 1976 *E.C.R.*, p.129, at paras.16-18; Case 12/86, *loc.cit.* n.111, p.3719; and Case C-18/90, *Kziber*, 1991 *E.C.R.*, p.I-199. The interpretation and effect of such an agreement is a matter ultimately falling under the jurisdiction of the ECJ to decide, see *Kupferberg*, para.17.

¹⁷⁶ See Case 181/73, *loc.cit.* n.113, p.449. However, agreements with third countries are not to be interpreted in the same broad, policy-oriented manner as Community treaties, See *Kupferberg*, *loc.cit.* n.174, at paras.28-31; and Case 270/80, *Polydor*, 1982 *E.C.R.*, p.329.

¹⁷⁷ See G.Bebr, 'Agreements Concluded by the Community and their Possible Direct Effect: From International Fruit Company to *Kupferberg*', 20 *C.M.L.Rev.*, 1983, p.46.

international commitments without first examining whether rights to individuals are conferred.¹⁷⁸ In this context, it is increasingly being realised that "the proliferation, increasing complexity and greater domestic impact of environmental agreements suggest that new agreements are likely to create rights more appropriate to direct enforcement or more likely to prejudice individuals",¹⁷⁹ and, consequently, more likely to be enforceable as an integral part of the Community legal order. [public interest litigation in Mediterranean Member States can involve implementation of the Barcelona Convention and Protocols as a matter of Community law to the extent they contain directly applicable provisions]

Indeed, the concept of 'direct effect' is particularly significant when the Member State has not acted as it should in order to give a Directive full force. However, one must always bear in mind the restrictions inherent in it, namely that a Directive is not directly applicable in its entirety, i.e. the parts that give States a margin of discretion are not, and only the core of the legal rules therein can have such effects;¹⁸⁰ nor can it impose in itself obligations on individuals, as it is addressed only to States,¹⁸¹ and, thus, it cannot be relied upon, after expiry of the time limit, against such persons;¹⁸² and last but not least, that environmental Directives usually instruct authorities to take certain measures and are not drafted with the specific objective of creating rights for individuals.¹⁸³

This last point presents the greatest difficulty for present purposes, in view of the fact that there is very little litigation in both European and national courts to give any more guidance on this issue. In this context, it has been suggested that it would be very helpful if Directives were drafted more closely in the style of Regulations, so as to grant rights to individuals even in the absence of proper application by the respective state.¹⁸⁴ On the other hand, the notion of 'rights' in the ECJ's jurisprudence is rather wider than in most national legal systems.¹⁸⁵ Although a general interest is not sufficient, the group of individuals concerned is rather extended according to the Court's reasoning; in the environmental context, for example, it has found that Directives establishing limit values for substances in water or air confer rights on the persons whose health might be endangered

¹⁷⁸ See, e.g., Case 40/72, *Schroeder v. Fed. Rep. of Germany*, 1973 *E.C.R.*, p.125; and Case 181/73, *loc.cit.* n.113.

¹⁷⁹ See M.Hession, 'The Role of the EC in Implementation of International Environmental Law', 2(4) *R.E.C.I.E.L.*, 1993, p.345.

¹⁸⁰ Case 88/79, *Grunert*, 1980 *E.C.R.*, p.1827.; *cf.* Case 286/85, *McDermott and Cotter v. The Minister for Social Welfare*, 1987 *E.C.R.*, p.1453. See L.Krämer, *Focus on European Environmental Law*, 2nd ed., 1997, pp.93-103, for a discussion of the directly applicable provisions of certain environmental Directives.

¹⁸¹ Case 152/84, *loc.cit.* n.172, p.723.

¹⁸² But Krämer submits that public authorities must apply a Directive, after its time limit has elapsed, even if it imposes additional burdens to individuals, *op.cit.* n.180, p.110.

¹⁸³ See S.Douglas-Scott, 'Environmental Rights in the European Union - Participatory Democracy or Democratic Deficit?', in Boyle & Anderson (eds.), *op.cit.* n.2, pp.122-3.

¹⁸⁴ See R.Wägenbaur, 'The European Community's Policy on Implementation of Environmental Directives', 14 *Fordham L.Rev.*, 1990-91, p.469.

¹⁸⁵ See J.G.J.Lefevere, 'State Liability for Breaches of Community Law', 5(8/9) *Eur.Env't L.Rev.*, 1996, pp.241-2; and Prechal, *op.cit.* n.121, pp.129-44.

by not reaching these values.¹⁸⁶ That of course does not necessarily mean that there should be a national remedy available to protect such rights or that standing should be given contrary to national rules, as will be made clear later.

Be that as it may, all 'directly effective' Community law, either primary or secondary, as well as international agreements binding on the Community, prevail over national law of any nature,¹⁸⁷ even if adopted subsequently.¹⁸⁸ In fact, it is more accurate to say that, in the latter instance, adoption of such legislation is not valid to the extent it is incompatible with Community provisions. Member States have a positive obligation to repeal conflicting legislation,¹⁸⁹ but the judiciary cannot wait for that; it has to give full effect to the Community rule and not apply any inconsistent statute whenever such an issue arises.

More precisely, the national judge must examine of his own motion - *ex officio* - whether a piece of legislation he intends to implement conforms to any relevant Community set of rules and, moreover, must apply the pertinent 'directly effective' provisions even absent invocation by a party to the case before him.¹⁹⁰ It is further established that national courts have an interpretative obligation to construe national law in the light of the wording and purpose of relevant Directives,¹⁹¹ both in cases of implementing legislation and when the respective Community rules have not been transposed;¹⁹² the same obligation applies for the administration.¹⁹³ However, the national judge is not unaided in this task; he can request the ECJ to deliver a preliminary ruling under Article 234 of the EC Treaty, which will be binding on his final decision,¹⁹⁴ on questions on the interpretation of primary and secondary Community law,¹⁹⁵ of the statutes of organs established by an act of the Council, or on the validity of Community acts. This interaction of the national judiciary with the

¹⁸⁶ See, among others, Case C-58/89, *Commission v. Germany*, 1991 *E.C.R.*, p.1-4983; and Case 361/88, *loc.cit.* n.137. See also L.Krämer, *European Environmental Law Casebook*, 1993, pp.368-9. It is, nevertheless, true that this line of jurisprudence is not consistent. For instance, the Court on another occasion held that Directive 75/442 on waste defines the framework for the action to be taken by the Member States regarding the treatment of waste and does not require, in itself, the adoption of specific measures or a particular method of waste disposal; it is therefore neither unconditional nor sufficiently precise, and thus is not capable of conferring rights on which individuals may rely as against the state, i.e. it cannot be construed as 'directly effective', see Case C-236/92, 1994 *E.C.R.*, p.1-483; cf. L.Kramer, *E.C.Environmental Law*, 4th ed., 2000, p.289.

¹⁸⁷ See Hartley, *op.cit.* n.117, pp.218-20; and Prechal, *op.cit.* n.121, pp.119-22.

¹⁸⁸ See, e.g., Case 106/77, *loc.cit.* n.119, at paras.17-18.

¹⁸⁹ See Case 167/73, *loc.cit.* n.120.

¹⁹⁰ See Joined Cases 87 to 89/1990, *A.Veholen and Others v. Sociale Verzekeringsbank*, 1991 *E.C.R.*, p.1-3757; and Case C-312/93, *Peterbroeck*, 1995 *E.C.R.*, p.4599.

¹⁹¹ See Case 14/83, *loc.cit.* n.171; G.de Búrca, 'Giving Effect to European Community Directives', 55 *The Modern Law Rev.*, 1992, pp.217-9; and Prechal, *op.cit.* n.121, Chapter 10.

¹⁹² According to Prechal, in the in the latter case there is an obligation of 'remedial' interpretation, see *op.cit.* n.121, p.215.

¹⁹³ Case 103/88, *Costanzo*, 1989 *E.C.R.*, p.1839, at para.33; but see Prechal, *op.cit.* n.121, pp.73-6.

¹⁹⁴ See Hartley, *op.cit.* n.117, Chapter 9.

¹⁹⁵ One of the earliest and most notable environmental cases brought before the Court for a preliminary judgment was Case 21/76, *Handelskwekerij G.J. Bier v. Mines de Potasses d'Alsace*, 1976 *E.C.R.*, p. 1735, where the ECJ interpreted the 1968 Brussels Convention on Jurisdiction and Enforcement of Judgments in Civil and Commercial Matters so as to give victims of transboundary pollution a free choice of venue.

European Court and the resulting joint legal interpretations provide the best illustration of how closely intertwined the Community and the Member States legal orders are. In fact, the ECJ has the opportunity to clarify a series of issues when asked for preliminary rulings with regard to environmental Directives, and has already delivered authoritative interpretations for several such instruments.¹⁹⁶

Beyond that well-settled process, a 1990 ECJ ruling seems to have opened the way for what has been called the 'indirect effect' of Directives. Pursuant to the *Marleasing* case,¹⁹⁷ when a Directive has not been transposed by a Member State - or has been partially or wrongly transposed, national courts have to interpret national law, whether it concerns legislation adopted prior to or subsequent to the Directive, as far as possible, within the light of the wording and the purpose of the Directive in order to achieve the result envisaged by it. It has been repeatedly suggested that the Court's findings go beyond a mere interpretative obligation and in substance require the national judge to give effect to the provisions of Directives regardless of the terms of national legislation being interpreted.¹⁹⁸ This raises questions of legitimacy of the courts' task as it has the potential to frustrate legitimate expectations of the parties.¹⁹⁹ However, according to the ECJ's own words, this function should be performed by a national court "so far as it is given discretion under national law",²⁰⁰ so that the division of powers within a certain jurisdiction is not unacceptably altered.

This doctrine - also classified as 'horizontal direct effect',²⁰¹ in view of the fact that it imports a Directive otherwise inapplicable even in litigation between private parties -,²⁰² if further developed and clarified by the Court,²⁰³ could have significant repercussions for direct litigation against individuals or corporations acting in contravention of the objectives laid down in environmental Directives, without having to go through administrative proceedings challenging related administrative acts first.

¹⁹⁶ See, P.Sands, 'European Community Environmental Law: Legislation, the European Court of Justice and Common-Interest Groups', 53(5) *The Modern Law Rev.*, 1990, at fn.82; and Case C-118/94, 1996 *E.C.R.*, p.I-1223, on the Wild Birds Directive; Case 359/88, 1990 *E.C.R.*, p.I-1509, on the Waste Directives; Case 295/82, 1984 *E.C.R.*, p.575, on the Used Oils Directive; and Case C-236/92, *loc.cit.* n.186, on the non-existence of directly effective provisions in Directive 75/442.

¹⁹⁷ Case C-106/89, *Marleasing v. Comercial Internacional de Alimentación*, 1990 *E.C.R.*, p.I-4135.

¹⁹⁸ For French jurisprudence accepting this notion, see D.Curtin, 'Directives: The Effectiveness of Judicial Protection of Individual Rights', 27 *C.M.L.Rev.*, 1990, pp.725-6.

¹⁹⁹ See, among others, de Búrca, *op.cit.* n.191, pp.223 and 227-33; N.Maltby, 'Marleasing: What is All the Fuss About?', 109 *The Law Quarterly Review*, pp.301-11, and relevant literature at fn.1

²⁰⁰ See Prechal, *op.cit.* n.121, pp.240-5.

²⁰¹ See, e.g., *ibid.*, pp.295-305.

²⁰² See discussion of that effect in J.Stuyck & P.Wytinck, 'Case C-106/89, *Marleasing SA v. La Comercial Internacional de Alimentacion SA*, Judgment of 13 November 1990', 28 *C.M.L.Rev.*, pp.205-23.

²⁰³ In fact, in case C-316/93, *Vaneeveld v. Le Foyer*, 1994 *E.C.R.*, p.I-763, Advocate General Jacobs proposed that the distinction be abandoned in favour of the principle that directives may impose directly effective obligations on individuals; however, the Court did not find it necessary to decide on this point. For a staunch advocacy of such a 'horizontal effect', see Conforti, *op.cit.* n.8, pp.37-8.

In the last few years, the Court also developed the notion of 'non-contractual strict liability' incurred by Member States for loss or damage caused to individuals as a result of breaches of Community obligations - irrespectively of their being 'directly effective' or not - for which the state - i.e. its legislative or executive branch - can be held responsible.²⁰⁴ In these cases - none of which related to environmental obligations, however, - the ECJ repeatedly said that certain conditions must be met for a right to reparation to exist: the rule of law infringed must be intended to confer rights on individuals, and in case of a Directive being breached, the content of these rights must be possible to ascertain on the basis of the latter's provisions; the breach must be sufficiently serious; and there must be a causal link between the violation resting on the State and the damage suffered by the injured parties. This is arguably an even more legitimate construction than the principle of 'direct' - let alone 'indirect' - effect.²⁰⁵

Accordingly, incorrect transposition of a Directive into national law can give rise to the appropriate circumstances for state liability.²⁰⁶ However, in such a case the 'seriousness'-of-the-breach criterion will depend on whether the Member State 'manifestly and gravely' disregarded the limits on its rule-making powers, which in turn hinges on the clarity and precision of the rule infringed, and the measure of discretion left to Member States.²⁰⁷ The ECJ has, indeed, left it to national legal systems to elaborate further substantive and procedural rules of liability and compensation, with the minimum requirements that these must not be less favourable than those relating to similar domestic claims, and must not be so framed as to make it virtually impossible or excessively difficult to obtain reparation. Should such claims be upheld in national courts they may provide an even better guarantee of Member State compliance, "since it will in practice be much more difficult... to disregard a decision of their own courts... than it is to disregard the decision of the more remote Court of Justice".²⁰⁸ However, only few cases of application of the so-called 'Francovich principle' by national courts are known to date.²⁰⁹

²⁰⁴ See Joined cases C-6/90 and C-9/90, *Andrea Francovich and Danila Bonifaci and Others v. Italy*, 1991 *E.C.R.*, p.I-5357; Joined Cases C-46/93 and C-48/93, *Bracherie du Pêcheur and Factorame*, 1996 *E.C.R.*, p.I-1029, at para.31; Case C-5/94, *Hedley Lomas*, 1996 *E.C.R.*, p.I-2553; Joined Cases C-178/94, C-179/94, C-188/94, C-189/94, and C-190/94, *Erich Dillenkofer and Others v. Germany*, 1996 *E.C.R.*, p.I-4845, at para.20; Joined Cases C-283/94, C-291/94 and C-292/94, *Denkavit International BV and Others v. Bundesamt für Finanzen*, 1996 *E.C.R.*, p.I-5063, at paras.47-50; and Case C-66/95, Judgment of 22 April 1977. See, generally, Prechal, *op.cit.* n.121, Chapter 12. On *Francovich*, see C.Plaza Martin, 'Furthering the Effectiveness of EC Directives and the Judicial Protection of Individual Rights Thereunder', 43 *I.C.L.Q.*, 1994, pp.35-50; and J.H.Jans, *European Environmental Law*, 1995, Ch.IV (2).

²⁰⁵ See J.Steiner, 'From Direct Effects to *Francovich*: Shifting Means of Enforcement of Community Law', 18 *Eur.L.Rev.*, 1993, pp.9-10.

²⁰⁶ See Case C-392/93, *British Telecommunications*, 1996 *E.C.R.*, p.I-1631, at para.40.

²⁰⁷ See Joined Cases C-283/94, C-291/94 and C-292/94, *loc.cit.* n.204, at para.50. Other factors to be taken into account are whether the infringement and the damage caused was intentional or involuntary, whether an error of law was excusable or inexcusable, whether a position taken by a Community institution contributed towards the breach, and the adoption or retention of national measures contrary to Community law.

²⁰⁸ Curtin, *op.cit.* n.193, p.712. In the same vein, see Plaza Martin, *op.cit.* n.204, p.45.

²⁰⁹ For the relevant case-law, including French and Spanish, see Lefevere, *op.cit.* n.185, p.238 at fn.3. An example of Greek jurisprudence applying the *Francovich* doctrine is the High Court's (Areios Pagos) Decision No.13/1992, (continued...)

Having said that, there now exists at least the possible alternative of invoking the doctrine of state liability as an effective remedy,²¹⁰ to the extent a right cannot be enforced before national courts on the grounds that the underlying provision has no 'direct effect', for instance because it imposes obligations on others than the state.²¹¹ It is equally true that the *Francovich* ruling establishes at least in principle a basis according to which Member States could be liable for damages resulting from their failure to implement environmental Directives which create 'individual rights', e.g. setting water or air quality standards, or giving the right to participate in environmental impact assessments or of access to information.²¹² That is despite fears that a rather constrictive interpretation is likely to result from the Court's wording unless the state involved has failed to transpose an environmental directive altogether. It has even been suggested that an individual's claim to reparation in such a situation is more likely to succeed when there exists a previous ruling on the same case or subject matter, and especially one based on the Article 226 procedure; in all other cases, the outcome would be at least uncertain.²¹³

More generally, Community law does not provide for special remedies that should exist in national jurisdictions to safeguard individual rights;²¹⁴ it basically protects national procedural autonomy, and only requires a minimum of equal availability of recourse for breaches of Community law on terms no less favourable than for similar infringements of national law.²¹⁵ More specifically, Member States are required to penalise infringements of Community law with appropriate penalties; the choice of the latter is left to the former's discretion, but they must be at least effective, proportionate and dissuasive, and analogous to penalties for similar infringements of national law.²¹⁶ It has been rightly pointed out, however, that this 'equal treatment' leads to 'unequal' remedies and procedures in the Community as a whole, in view of the very divergent procedural systems that operate in the various countries.²¹⁷

²⁰⁹(...continued)
unreported.

²¹⁰ See *ibid*, p.241.

²¹¹ See re-affirmation of the principle in Case C-91/92, *Paola Faccini Dori v. Recreb Srl*, 1994 *E.C.R.*, p.1-3325.

²¹² See Sands, *op.cit.* n.3, p.671. But *cf.* Case 236/92 *Difesa della Cava*, 1994 *E.C.R.*, I-483; and W.Abboud, 'EC Environmental Law and Member State Liability - Towards a Fourth generation of Community Remedies', 7(1) *R.E.C.I.E.L.*, 1998, pp.88-91.

²¹³ See Lefevre, *op.cit.* n.185, pp.240-1.

²¹⁴ See Case 158/80, *Rewe v.Hauptzollamt Kiel*, 1981 *E.C.R.*, p.1805.

²¹⁵ See, e.g., Case 45/76, *Comet v.Produktschap voor Siergewassen*, 1976 *E.C.R.*, p.2043; and Prechal, *op.cit.* n.121, pp.148-87.

²¹⁶ See Case 8/88, *Commission v. Greece*, 1989 *E.C.R.*, p.2965. Note also that the Council has urged the Commission to consider including in its future proposals for environmental instruments a provision requiring national measures to comprise appropriate dissuasive sanctions for non-compliance with the requirements of the relevant Community acts, see EC Council, *op.cit.* n.164, at para.12; and EC Commission, First..., *op.cit.* n.146, pp.10-1.

²¹⁷ See J.Bridge, 'Procedural Aspects of the Enforcement of European Community Law through the Legal Systems of the Member States', 10 *Eur.L.Rev.*, 1985, p.40.

Only when national provisions are not adequate to effectively enforce Community law, or, in the Court's words, the exercise of Community rights is rendered "virtually impossible or excessively difficult",²¹⁸ are Member States under a duty to provide for special remedies.²¹⁹ In this connection, all legal systems should respect, *inter alia*, the principle that a decision by a national authority rejecting a claim under Community law must be reasoned and subject to judicial review;²²⁰ that in cases involving Community law where the sole obstacle to the granting of an *interim* injunction is a rule of national law, that rule should be set aside;²²¹ and that a Member state cannot rely on national time limits for bringing proceedings to claims arising under a Directive, until the latter has been properly implemented.²²²

Still, the core issue for individuals challenging state behaviour before the courts, especially when environmental Directives protecting collective interests are in question, is that of standing. This is a matter also left to national law to define,²²³ to the extent the right to effective judicial protection is not undermined.²²⁴ Consequently, the great divergence of relevant rules in Member States is maintained, still placing an additional barrier to the effective enforcement of Community environmental law.²²⁵ Long experience has shown, however, that complaints by concerned citizens can be best handled at the local level where they arise. As a general rule, the public do not have sufficient access to the national courts for environmental matters, although these *fora* are better placed to take into account the particular context of the environmental measures as it applies in each Member State, and especially to grant appropriate *interim* measures. Such access would make it more likely that individual cases concerning problems of implementation of Community law are resolved in accordance with the latter's requirements, and could even deter potentially liable actors from breaching environmental regulations.²²⁶ Hence, calls for the development of more considered principles and procedures taking into account the various private and collective interests that may be affected by a flawed implementation of Community rules are increasingly heard.²²⁷

²¹⁸ See Case C-312/93, *loc.cit.* n.190.

²¹⁹ See, e.g., *Von Colson*, *loc.cit.* n.172, at para.23.

²²⁰ Case 222/86, *UNECTEF v. Heylens*, 1987 *E.C.R.*, p.4097.

²²¹ Case C-213/89, *R. v. Secretary of State for Transport ex parte Factorame (No.2)*, 1990 *E.C.R.*, p.I-2433.

²²² Case C-208/90, *Emmott*, 1991 *E.C.R.*, p.I-4269.

²²³ See Prechal, *op.cit.* n.121, pp.166-8; and *infra*, Chapter 8, p.354.

²²⁴ See Joined Cases C-87 to C-89/90, 1991 *E.C.R.*, p.I-3757, at para.23.

²²⁵ See Douglas-Scott, *op.cit.* n.183, pp.124-5.

²²⁶ EC Commission, *op.cit.* n.163, p.12.

²²⁷ See, e.g., Macrory, *op.cit.* n.169, pp.367-8; and E.Rehbinder, 'Locus Standi, Community Law and the Case for Harmonization, in H.Somsen (ed.), *op.cit.* n.170, pp.151-66.

7.3. Concluding Remarks.

Summing up the main findings of this Chapter, one must start from the realisation that the task of implementing environmental standards laid down in international treaties within each party's jurisdiction is usually very complex and demanding, requiring legislative action, as well as practical measures and investments and/or institutional changes for its effective completion. The applicable instruments, adopted both at the Community and regional or global levels, do not, as a rule, describe the necessary actions in great detail, thus leaving a great measure of discretion as to the choice of means. Still, this does not imply a lesser duty to comply and effectively execute international undertakings. Even when international instruments lay down in rather precise terms the necessary implementing measures, however, it is often observed that the states liable to adopt them remain inactive, especially outside the Community system where at least formal transposition is sooner or later achieved. Hence, the set of rules adopted in the MAP context have not directly resulted in a respective transformation of the legal framework in Mediterranean countries.

Ascertaining the degree of formal compliance is difficult enough as far as international rules, and rather easier as far as environmental Directives, are concerned, but when one turns to practical and effective compliance both systems present a notable weakness both to closely follow what is actually happening and to enforce unfulfilled norms. This is where national legal orders with their full arsenal of compliance-control and enforcement mechanisms emerge as a crucial complement to centralised enforcement.

If this is made possible at all in relation to general international law, it is through the incorporation of treaty rules, according to the constitutional law of each country, and the critical role of the judiciary, which, with varied effectiveness - as well as willingness, for that matter -, translates the former and ensures compliance in concrete cases. The jurisprudence of the Greek Council of State shows what a great impact an environmentally-conscious national judge can have in a relatively short period of time. However, it is submitted that the absence of any internationally harmonised procedural guarantees that will empower the citizens to bring appropriate cases before the courts, thus allowing the latter to better enforce international environmental standards in individual countries is strongly felt.

Accurate, timely and effective implementation of Community law, on the other hand, may be pursued by much more concise and powerful means of decentralised enforcement, since the national judge is much more closely associated, in fact subordinated, to the Community legal order, and under precise duties that relate to the rectification of both public and private non-compliance with Community norms. Concerned individuals are additionally given an array of possible ways to challenge such practices, using the doctrines of 'direct' and 'indirect effect', and of 'state liability', albeit after a series of stringent conditions have been satisfied. Despite this advanced setting, the Community system is not adequate in its results and is similarly still lacking in uniform minimum

remedies and procedural standards, prominent among which are rules on standing, so as to better enable concerned citizens and their associations to take up the task of enforcing environmental norms at the municipal level.

The idea that national courts are appropriate *fora* to enforce international and Community environmental law is in fact increasingly acknowledged among international lawyers.²²⁸ It follows that international law in general needs to find concrete legal ways to intervene in the sphere of national procedural mechanisms, until recently viewed as the reserved domain of domestic jurisdiction, and gradually turn them into effective vehicles for control over compliance with international environmental obligations. The next Chapter will look into some tentative efforts towards that direction.

²²⁸ See D.Bodansky & J.Brunnée, 'The Role of National Courts in the Field of International Environmental Law', 7(1) *R.E.C.I.E.L.*, 1998, pp.11-20; M.Holley, 'Sustainable Development in Central America: Translating regional Environmental Accords into Domestic Enforcement Action', 25 *Ecology L.Q.*, 1998, pp.89-119; D.S.Ardia, 'Does the Emperor have no Clothes? Enforcement of International Laws Protecting the Marine Environment', 19 *Michigan J.I.L.*, 1998, pp.555-63; D.Noble, 'Enforcing EC Environmental Law: The National Dimension', in Somsen (ed.), *op.cit.* n.170, p.46; and H.G.Schermers, 'The Role of Domestic Courts in Effectuating International Law', in M.Brus *et al.* (eds.), *The United Nations Decade of International Law - Reflections on International Dispute Settlement*, 1991, pp.77-85.

CHAPTER 8.

***PROCEDURAL RIGHTS: TOOLS FOR IMPLEMENTATION AND
COMPLIANCE CONTROL OF INTERNATIONAL ENVIRONMENTAL
OBLIGATIONS IN THE MEDITERRANEAN.***

This Chapter continues the line of reasoning developed in Chapter 7 and considers the extent to which international and Community law has introduced and established a series of procedural rights with a view at improving the law-making and law-enforcement machinery for environmental protection within individual states.

Prompted by the development of very advanced enforcement systems in the framework of the European and American human rights regimes, there has recently been considerable discussion on the need to establish a right to/on the environment as a human right, so as to expand the coverage of the relevant compliance-control mechanisms in the environmental sphere.¹ From a substantive point of view, if one examines the constitutional orders of Mediterranean states, it is actually possible to find some of them, mostly on the European coast, establishing a right to live in a healthy, balanced environment,² and additionally defining that it is the duty of the state and the local government - but often of the citizens as well - to preserve and enhance the natural environment - sometimes with particular reference to special protection of the sea -³ and to prevent environmental pollution.⁴ Furthermore, in some countries such as Greece, conservation and protection of the quality of the environment in general is deemed to contribute towards enhanced quality of life, and thus positive development of individuals, and consequently enjoys the full protection of goods linked to the personality.⁵

¹ See, among others, A.E.Boyle & M.R.Anderson (eds.), *Human Rights Approaches to Environmental Protection*, 1996.

² See 1990 Croatian Constitution, Article 69(2); Turkish Constitution, Article 56; 1991 Slovenian Constitution, Article 72; and Spanish Constitution, Article 45(1).

³ See 1990 Croatian Constitution, Article 52.

⁴ See 1990 Croatian Constitution, Article 69(3); Greek Constitution, Article 24(1); Maltese Constitution, Section 9; Turkish Constitution, Article 56; 1991 Slovenian Constitution, Article 73; and Spanish Constitution, Article 45(1) and (2), which, moreover in para.3 provides that the violators of the said duties will face penal or administrative sanctions, and shall be obliged to repair the damage caused.

⁵ See Court of First Instance of Nauplion, No. 163/1991, *Επιθεώρηση Εμπορικού Δικαίου* (Review of Commercial Law), Vol.μβ, 1991, p.628, whereby hampering the use of the sea and coast by way of pollution caused by industrial discharges may provide the grounds for an actionable claim on the mere basis of Article 57 of the Civil Code concerning protection of the human personality; and in the same vein, Court of First Instance of Volos, Decision No.1097/1989, *Νομικό Βήμα* [Legal Tribune], Vol.38, p.308; and One-Member Court of First Instance of Serres, Decision No.12/1994, *Νόμος και Φύση* [Law and Nature], Vol.2(1), 1995, p.203.

However, constitutional provisions on environmental protection are usually treated as mere guidelines to the legislature to enact proper legislation as far as it is possible; thus, the Spanish provision is not enforceable through a constitutional complaint brought by an individual,⁶ while the Maltese Constitution explicitly adds that these guiding principles are not "rights enforceable in any court" (Section 21).⁷ In general, it would be fair to say that different attitudes of courts in different countries make the constitutional provision enforceable or not, and, in this connection, there is an on-going debate over the appropriate role of the judiciary.⁸

At the international level, it has been convincingly argued that a substantive and generic right to a decent environment "would add little to what already exists in international law" and may be largely redundant,⁹ and that it would be much more constructive to focus on certain procedural aspects that should be harmonised worldwide.¹⁰ In fact, the Rio Declaration reaffirms the desirability of such a development in Principle 10, which reads:

"Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided."¹¹

As Principle 10 indicates, such rights may include, for instance, civic participation in planning and decision-making, including participation in environmental impact assessment procedures; rights to information; rights of legal redress, including broad *locus standi* to facilitate public interest litigation, and the right to effective remedies in case of environmental damage. These prerogatives are complementary in the sense that together they form the backdrop on which concerned citizens and their associations can rely in order to follow up and enforce international environmental norms at the domestic level.

⁶ See S.Douglas-Scott, 'Environmental Rights in the European Union - Participatory Democracy or Democratic Deficit?', in Boyle & Anderson (eds.), *op.cit.* n.1, pp.110-1.

⁷ Note that in the United States as well courts almost uniformly hold that general environmental provisions in the Constitution are ineffective absent additional legislation, see Pollard III, 'A Promise Unfulfilled: Environmental Provisions in State Constitutions and the Self-Execution Question', 5 *Vanderbilt J. of Nat.Res.L.*, 1986, p.351.

⁸ See F.du Bois, 'Social Justice and the Judicial Enforcement of Environmental Rights and Duties', in Boyle & Anderson (eds.), *op.cit.* n.1, pp.153-75.

⁹ See, e.g., A.Boyle, 'The Role of Human Rights Law in the Protection of the Environment', in A.E.Boyle & M.R.Anderson (eds.), *op.cit.* n.1, pp.48-57.

¹⁰ See *ibid.*, pp.59-63; M.R.Anderson, 'Human Rights Approaches to Environmental Protection: An Overview', in Boyle & Anderson (eds.), *op.cit.* n.1, pp.1-23, at p.9; and Douglas-Scott, *op.cit.* n.6, pp.112-22. See also the Final Report on Environmental Rights by the Special Rapporteur Ksentini of the UN Sub-Commission on Prevention of Discrimination and Protection of Minorities, UN Doc.E/CN.4/Sub.2/1994/9, esp.at paras 67-70, 220 and 221, discussed in J.Cameron & R.Mackenzie, 'Access to Environmental Justice and Procedural Rights in International Institutions', in Boyle & Anderson (eds.), *op.cit.* n.1, pp.129-52.

¹¹ See also Agenda 21, Ch.23, esp.at 23.2. But *cf.* Climate Change Convention, Article.6.

Accordingly, the following Sections will examine in more detail the requirement of prior environmental impact assessment, public access to environmental information, and public access to administrative and judicial proceedings. The last Section of this Chapter is devoted to the 1993 North American Agreement on Environmental Co-operation which represents the most advanced instance of international law intruding in the reserved sphere of national enforcement of environmental laws outside the EU to date.

8.1. Environmental Impact Assessment with Public Participation.

The procedural requirement to carry out environmental impact assessments (EIAs) prior to any major project with possible environmental consequences is gaining widespread acceptance as a standard legitimately imposed by international law. This is thought to provide the necessary data that will inform, on one hand, the relevant decision-making process, and, on the other, any subsequent action the public may want to pursue in order to mitigate any adverse effects of the activities once these are authorised. Provisions to that effect are now quite common in most environmental treaties. Additionally, there exists an *ad hoc* instrument for the ECE region, the 1991 Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention). However, the most detailed and influential international regulation of the matter is still found in the context of Community law.

8.1.1. Global and Regional Instruments on Environmental Impact Assessment.

More specifically, the LOSC introduces the requirement of prior environmental assessment of the potential effects of activities under the jurisdiction or control of Parties, which may cause substantial pollution of or significant harmful changes to the marine environment, and of communication of relevant reports (Art.206). Although this proviso does not impose an absolute or strict duty of environmental impact assessment - which still arguably flows directly from the obligation not to cause environmental harm - since such an assessment is compulsory only 'as far as practicable', it is significant in that it stresses the importance of anticipating harm and not dealing with it *ex post facto*. In that sense, it has certainly influenced the decision of Mediterranean states to incorporate a general requirement to that effect in the revised Barcelona Convention. In view of the impressive number of conventional stipulations that reiterate this rule,¹² it is quite clear that

¹² See, e.g. 1986 Noumea Convention, Art.16; 1978 Kuwait Regional Convention, Art.XI; 1982 Jeddah Regional Convention, Art.XI; 1981 West and Central Africa Regional Convention, Art.13; 1983 Wider Caribbean Regional Convention, Art.12; 1985 East Africa regional Convention, Art.13; 1989 South- East Pacific Protected Areas Protocol, Art.VIII; 1990 Wider Caribbean Specially Protected Areas Protocol, Art.13; while Art.7 of the 1992 Helsinki Convention, despite its title, is in reality a notification and consultation article, which still implicitly recognises the existence of EIA obligations.

studies to assess the impact of proposed activities to the marine environment are today a mandatory requirement.

That makes the inclusion of EIA provisions in the 1995 revision of the Barcelona Convention and Protocols a rather late, albeit necessary, progressive step. Under the revised Convention, EIA is a prerequisite for authorising any proposed activity “likely to cause a significant adverse impact on the marine environment” (Art.4(3)(c)). Despite the value of this provision as such, one cannot help noticing that it is rather hortatory - or else a guiding principle as opposed to a minimum standard - allowing too much discretion to the Parties as far as the actual procedure is concerned, with no guidelines, let alone projects for which prior EIA would be compulsory, to limit this discretion in any way.

On the other hand, the revised Dumping Protocol introduces a rather more streamlined EIA procedure, without even explicitly stating so: The dumping of some specified categories of wastes that may still be legitimately carried out requires a prior special permit that may only be issued after “careful consideration of the factors set forth in the Annex”, which comprise all possible effects of the proposed activity on amenities, marine life, and any other use of the sea, as well as possible alternatives (Art.6(1) and Annex, at C).

It is regrettable that there is no such prerequisite in the revised Land-Based Sources Protocol, despite the stated requirement for an authorisation and regulation system to be set up in each country. An EIA prerequisite in this context would likely lead to a radical reversal of the burden of proof as discharges of dangerous substances into the aquatic environment would not only be regulated and carried out under specified conditions, but the entrepreneur would have to produce scientific evidence that a particular activity in a precise area would not have excessive malevolent effects in order to be given consent in the first place.

That is exactly what is foreseen in the Offshore Protocol, in which legal prescriptions become much more concrete. A “survey concerning the effects of the proposed activity on the environment” always forms part of the application to commence operations addressed to the competent authority (Art.5(1)(a) and 6(1)). The latter may also request a full EIA to be carried out, depending on the character of the proposed activity, which must contain all elements listed in Annex IV. The notion of post-project analysis is also discernible in the operator’s obligation to monitor the effects of activities on the environment, under the supervision of the competent authority (Art.19(1)).

The importance of the inadequate formulation of the revised Barcelona Convention previously noted is somewhat minimised in the event another state is likely to suffer an adverse impact (Art.4(3)(d)). Then the state concerned to protect its interests is probably going to make an appropriate claim, and thus initiate the assessment procedure. In this context, the Espoo Convention is very relevant - albeit applicable only to European Mediterranean states - to the extent it elaborates

on the EIA procedure that is required for projects with an impact felt across borders. Although the Convention has only recently entered into force,¹³ it has influenced other international instruments, and certainly the amendments to the EIA Directive discussed below.¹⁴

The purpose of this Convention is, more broadly, to 'prevent, reduce and control significant adverse transboundary environmental impact from proposed activities' (Art.2(1)). For that, Parties have to take all necessary measures (Art.2(2)), including the establishment of procedures for carrying out EIAs with a specified minimum content; and notification to and consultation with other Parties likely to be affected by the planned activity (Arts.2(4) and (5), 3 and 5). Its material scope is wider than the EC Directive's,¹⁵ as it applies also to large pipelines, large dams, major mining, offshore hydrocarbon production, major oil and chemical storage facilities, and deforestation of large areas (Appendix I). As the EIA requirement applies to activities likely to have 'a significant adverse environmental impact' (Art.2(3)), criteria to assist in that determination are set out in Appendix III. A noteworthy procedure is that established under Appendix IV, whereby the ultimate decision on whether the potential impact is significant, and consequently on whether to carry out an EIA or not, is considerably limited by the authoritative opinion of an inquiry commission. EIAs are transmitted to Parties likely to be affected, and, importantly, the public in areas likely to be affected has the right - a right that has to be equivalent to that enjoyed by the citizens of the country of origin (Art.2(6)) - to be informed on the content of EIAs and formulate comments that are transferred to the country of origin before the decision is taken (Art.4(2)).

Post-project analysis is also called for, with ensuing duties to notify and consult with states found to be affected at that stage (Art.7). This is a very essential new element in the EIA concept, because it imports the idea that the process prescribed should be taken seriously into account when deciding a project, and the soundness of any decision should be tested by monitoring and further analyses after the activity in question has gone under way. In fact, as early as 1987, the ECE Task Force on EIA had pointed that "a successful EIA is one which ensures that all relevant impacts associated with the proposed project are adequately and fully taken into account in the decision-making process".¹⁶ It follows that EIA must not be viewed as a mere formality, but rather guide action - or inaction - in a substantive way. As studies of future impact are rarely straightforward or produce a completely guaranteed prognosis, the 'precautionary principle' comes into play in the relevant decision-making.

¹³ In September 1997. From the Mediterranean states only Albania, Croatia and the EU Members have ratified it to date.

¹⁴ See also ECE, *Current Policies, Strategies and Aspects of Environmental Impact Assessment in a Transboundary Context*, 1996, p.vii.

¹⁵ See *infra*, p.336.

¹⁶ ECE, 'Application of Environmental Impact Assessment, Highways and Dams', *Environmental Series 1*, 1987, ECE/ENV/50, pp.33 and 60.

Environmental assessment procedures are being currently introduced in Mediterranean states at an increasing pace; although, by 1992, apart from EU members, the only Mediterranean countries that had enacted EIA legislation were Cyprus, Israel and Turkey,¹⁷ some form of relevant legislation - albeit not fully implementing the Espoo Convention -¹⁸ is today in place also in Albania, Croatia, Malta and Slovenia.¹⁹ What is more, it seems there is considerable scope for rapid expansion of the standard in the Southern coast which is manifestly lagging behind. In 1995, for instance, the African Ministers responsible for the environment solemnly declared their commitment to adopt national EIA instruments, with special attention to coastal areas, and recognised that although financial and technical resources still sparse in Africa would be needed, they would exhaust all internal and external sources to achieve this objective. In this context, they agreed on a number of co-operative measures to enhance capacity in implementing EIA procedures in the continent, importantly including the future adoption of a relevant regional Convention.²⁰

8.1.2. Council Directive 85/337 on Environmental Impact Assessment.

Let us now turn to this very important piece of Community legislation, the first 'horizontal' instrument having broad repercussions in all environmental sectors and indeed many areas of economic and social activity. Hence, it is not surprising that it took five years to negotiate, and that its wording is often vague and unclear.

The Directive lays down a procedure, whereby, according to a 'preventive' rationale, before permission is granted for certain development projects, likely to have significant effect on the environment, because of their nature, size, location and other factors, a prior assessment of possible environmental impacts must be executed (Art.2 (1) and (2)). EIA is mandatory for projects listed in Annex I (Art.4(1)),²¹ whereas EIA on Annex II projects, deemed to have less intrinsic characteristics adversely affecting the environment, is left to the discretion of Member State (Art.4(2)).²² The relevant determination involves specification of certain categories of projects or establishment of criteria and/or thresholds (Art.4(3)).

The EIA must cover certain types of environmental impacts and at the same time take account of individual circumstances (Art.3), and is carried out by experts appointed by the developer

¹⁷ See N.A.Robinson, 'International Trends in Environmental Impact Assessment', 19 *Boston Coll.Env'l Aff.L.Rev.*, 1992, p.597.

¹⁸ ECE, *op.cit.* n.16, p.46.

¹⁹ See *ibid.*, pp.1-25.

²⁰ See Communiqué of the African High-level Ministerial Meeting on Environmental Impact Assessment (EIA), Durban, South Africa, June 24-25, 1995, reprinted in World Bank, *Environmental Assessment (EA) in Africa - A World Bank Commitment* (Proceedings of the Durban (South Africa) Workshop, June 25, 1995), 1996.

²¹ Namely oil refineries; large thermal power stations; nuclear power stations and radioactive storage and disposal installations; iron and steel works; asbestos and integrated chemical installations; motorways, railways and airports; ports and inland waterways; and hazardous waste landfill, incineration or treatment installations.

²² Annex II covers agriculture and food processing; extractive industry and metal processing; energy industry; glass manufacture; chemicals; textile, leather, wood, rubber and paper industry; infrastructure projects etc.

(Art.5(1)), i.e. not independent. It must include detailed data meeting some minimum requirements (Art.5(1) and (2) and Annex III), but also a non-technical summary, so as to make it accessible to the public. The latter, together with designated environmental authorities, is entitled to active participation before consent is given (Art.6); in particular, it has the right to be fully informed and submit comments on the proposed project. If a project is likely to have transfrontier reach, interested states must also be informed and consulted (Art.7), along the lines of the Espoo Convention. Finally, the parties consulted have the right to be informed about the decision and any conditions attached (Art.9).

The application of this Directive has turned out to be very problematic.²³ The transitional period 1985-1988 was apparently not sufficient for most Member States to adopt the necessary legislative instruments;²⁴ thus, the process of formulation of appropriate legislation continued through the early 90s in several countries, including Greece, France and Italy.²⁵ This delay gave the ECJ the chance to proclaim the 'direct effect' of certain provisions, especially of Articles 2, 3 and 8,²⁶ which "[r]egardless of their details, ... unequivocally impose on the national authorities responsible for granting consent an obligation to carry out an assessment of the effects of certain projects on the environment".²⁷ The Court had in this context a chance to clarify the doctrine: It held that the opportunity of individuals to rely on provisions of a Directive found to have 'direct effect' is not a condition for recognising 'direct effect', but conversely a consequence of that effect. Consequently, national authorities are under an obligation to abide by these provisions, irrespective of whether individuals may invoke them as against the state.²⁸

But even when they eventually proceeded to transposition, many European governments proved reluctant to make EIA mandatory for Annex II projects, some of which have a considerable impact on the environment; in fact, some countries have gone as far as excluding generally and definitely from possible assessment one or more classes of projects included in Annex II, a practice recently reproved by the ECJ.²⁹ Among Mediterranean Member States one can clearly distinguish two very different approaches: in France and Greece all categories of Annex II projects are subject

²³ In 1994, e.g., the lion's share of infringements of environmental directives related to Dir.85/337; failure to assess the impact of specific Annex II projects was the commonest grounds of complaint, see EC Commission, *Twelfth Annual Report on Monitoring the Application of Community Law (1994)*, COM(95) 500 final, pp.63-4.

²⁴ For a succinct summary of difficulties encountered in transposing the Directive, see EC Commission, Report from the Commission of the Implementation of Directive 85/337/EEC on the Assessment of the Effects of Certain Public and Private Projects on the Environment and Annex for the United Kingdom, COM(93) 28 final - Vol.12, 2 April 1993, pp.64-5. Luxembourg was the only Member State against which an ECJ judgment has been issued for failure to abide by the deadline, see Case C-313/93, *Commission v. Luxembourg*, 1994 *E.C.R.*, p.I-1279. Belgium has subsequently been condemned for incorrect transposition, see Case C-133/94, *Commission v. Belgium*, 1996 *E.C.R.*, p.I-2323.

²⁵ See EC Commission, *op.cit.* n.24, pp.13-5.

²⁶ See Case C-431/92, *Commission v. Germany*, 1995 *E.C.R.*, p.I-2192.

²⁷ *Ibid.*, at para.40.

²⁸ *Ibid.*, p.I-2220. See also A.G.Ureta, 'The E.C. Environmental Impact Assessment Directive Before the European Court of Justice', 5(1) *Env'l Liability*, 1997, pp.9-10.

²⁹ See Case C-133/94, *loc.cit.* n.24, at para.42.

to a mandatory EIA, while in Italy and Spain a considerable number of broad groups of such projects remain uncovered.³⁰ However, in Greece, which, moreover, is the only Mediterranean Member state where environmental information is submitted after the initial approval of siting,³¹ there are frequent complaints about failure to implement the relevant legislation.³²

It has also become apparent that some of the substantial value of assessing the impact before an activity is carried out is lost *en route*, as the Directive lays down only the procedure and not any substantial requirement, for instance, it does not define when a specific project has to be rejected following a negative EIA, or even what consists an acceptable and valid EIA; in this vein, it is characteristic that Commission proposals for a Directive making EIA mandatory for governmental projects and policies have been abortive due to stiff opposition by some Member States.³³ Moreover, in France and Spain, there is no provision for the formal review of information submitted by the developer, while in Greece and Italy this task has been assigned to specific environmental authorities, in the latter a special EIA Commission.³⁴

This absence of standardised arrangements concerning the substance of the assessment has led to large variations in the quality of environmental impact studies (EISs) between Member States, but also within each country. In this connection, the Commission's report found that in France studies prepared for large, national, and public projects were broadly of better quality than those concerning small and private projects, which, however, accounted for 70% of the total.³⁵ In Greece, industrial projects attract the best EISs, while in general the time and money devoted to the preparation of EISs, as well as the consideration of alternatives, are inadequate. In Italy, the quality of these studies is improving since the EIA Commission came in full operation; while in Spain, only a 20% of EISs are estimated to be of a satisfactory quality.

That is, of course, different from actually taking into account the environmental impact of a proposed project in the final decision. In fact, it is rather difficult to ascertain the extent to which the EIA process decisively influences decision-making by the administration. It would be, nevertheless, fair to say that public reaction and pressure does often lead to environmental impacts being taken into account and relevant conditions imposed in Mediterranean Member States.³⁶ It must be noted that in Italy and Spain, some guarantees to that effect seem to exist; in the former, the Ministers concerned are under a duty to issue a decision on environmental compatibility, on the basis of advice from the EIA Commission, while in the latter, there is provision for the preparation

³⁰ EC Commission, *op.cit.* n.24, pp.17-8.

³¹ *Ibid.*, p.24.

³² See EC Commission, *Eleventh Annual Report on Monitoring the Application of Community Law*, COM(94) 500 final, 29 March 1994, p.64.

³³ P.Sands, *Principles of International Environmental Law*, Vol.1, 1995, p.588.

³⁴ EC Commission, *op.cit.* n.24, pp.24-5.

³⁵ *Ibid.*, Table 4.4. at p.43.

³⁶ *Ibid.*, Table 4.9. at p.53

of a Declaration of Environmental Impact containing the written decision or judgment of the competent environmental authority, which is furthermore publicised.³⁷ In Spain in particular, there are also formal arrangements for monitoring the project and its environmental impacts, through the mandatory Programme of Environmental Surveillance,³⁸ although no such requirement appears in the Directive.

Availability of EISs to the public before consultation was also found to remain an empty principle, with considerable practical difficulties arising in most Mediterranean states.³⁹ In fact, the consultation process itself presents great variations in these countries, and has been satisfactory only when it concerns high-profile and controversial projects; in most other cases, the public is either not aware of their procedural rights or is not adequately informed so as to participate in the debate in any meaningful way.⁴⁰ However, the importance of public participation in the EIA process cannot be overstressed,⁴¹ since it can in principle result in meeting public needs and making the administration accountable for relevant choices, in better access to information, and better development decisions, and in increased credibility of the entire EIA process.

The EIA Directive has, in fact, one of the highest records of complaints (one in four in 1998) relating to its implementation among environmental instruments, whereas infringement proceedings are currently under way against, among others, Italy, Spain and Greece.⁴² During the first two years of application, the number of complaints received by the Commission for all Member States was three hundred and thirty four,⁴³ and has since steadily risen. Complaints received tend mostly to be about the quality of impact assessment studies, the examination of alternatives, and the failure to take into account opinions validly expressed at public enquiries, i.e. matters for which the Directive being of a procedural nature does not give the Commission enforcement of follow-up powers, and in any case are very difficult for the latter to substantiate and contest.⁴⁴ That has prompted the Commission to urge concerned individuals to make full use of the internal means of

³⁷ *Ibid*, p.31. However, up to late 1991, only one negative Declaration of Environmental Impact had been issued at national level, see Table 4.9. at p.53.

³⁸ *Ibid*, p.32, and Table 4.10 at p.55. In Italy and France, such a procedure applies only to certain projects either because of their nature or because conditions to that effect have been attached, while in Greece relevant checks are occasional and selective.

³⁹ *Ibid*, Table 4.7. at p.48.

⁴⁰ *Ibid*, Table 4.8. at p.51.

⁴¹ See, among others, W.A.Tilleman, 'Public Participation in the Environmental assessment Process: A Comparative Study of Impact Assessment in Canada, the United States and the European Community', 33 *Columbia J. of Trans'l L.*, 1995, pp.343-8.

⁴² See EC Commission, First Annual Survey on the implementation and enforcement of Community environmental law, October 1996 to December 1997, SEC 1999/592, 27.4.1999, p.46.

⁴³ EC Commission, *op.cit.* n.24, Table A.2.1. at p.71. Spain was the most complained-against country with 72 complaints, followed by the UK (48), Italy (42), Germany (37), Greece (34), and France (33).

⁴⁴ See EC Commission, *Implementing Community Environmental Law*, COM(96) 500 final, 22.10.1996, pp.27-8; and *op.cit.* n.42, p.47.

redress in each state,⁴⁵ which underlines the particular importance of uniform rules on standing discussed below.

That said, in 1993, i.e. three years after its due date, the Commission published a report on the implementation of the Directive during the first six years of application, i.e. until July 1991.⁴⁶ This early report focuses on both formal and practical compliance with the requirements of the Directive, on the criteria and/or thresholds adopted for the selection of Annex II projects to be subject to assessment, on key aspects of EIA practice, and on an overall assessment of the effectiveness of implementation and relevant difficulties. This report was followed by consecutive proposals for amending the Directive, which were informed by the following objectives:⁴⁷

- To ensure that the Directive's provisions are applied to the full range of projects which may have significant impacts on the environment;
- To ensure that the EIA process starts sufficiently early in the planning and design of projects and that alternatives and mitigatory measures receive adequate consideration;⁴⁸
- To strengthen quality control of the assessment and review of EIS;
- To ensure that arrangements relating to the availability of EISs and consultations based upon it are made more effective;
- To ensure that satisfactory arrangements are made for taking the EIS and consultation findings into account in project authorisation decisions; and
- To strengthen arrangements for monitoring post-implementation environmental impacts.

To what extent these objectives are served by the proposals produced from 1994 to 1997 by the Commission is debatable. The 1994 proposal included new provisions on the compulsory assessment ('screening') of Annex II projects,⁴⁹ on the basis of limit values applicable in the Member State and the selection criteria defined in new Annex IIa; and on the content of the assessment ('scoping', i.e. a requirement that the competent authority specifies the scope of the information to be supplied in consultation with the authorities concerned and the project manager and before application is made; compulsory assessment of alternatives etc.). The range of projects listed in the two Annexes was also rearranged and expanded.⁵⁰ In addition, the requirements of the Espoo Convention were more fully accommodated in relation to projects with transboundary impact.

⁴⁵ See EC Commission, *op.cit.* n.42, pp.47-8.

⁴⁶ See EC Commission, *op.cit.* n.24.

⁴⁷ See *ibid.*, pp.61-2.

⁴⁸ *Cf.* the long history of the 'alternatives' component of the EIA process in the US, see Tilleman, *op.cit.* n.41, pp.384-93.

⁴⁹ See EC Commission, Proposal for a Council Directive amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, COM(93) 575 final - 94/0078 (SYN), 1994 *O.J.* (C 130) 8.

⁵⁰ Importantly, Annex II is envisaged to include all waste water treatment plants.

The comments received on that initial draft ranged from those considering the suggested definitions and criteria as general and vague, and thus bound to cause further disparity and confusion, and putting forward the idea of an exclusive list of projects subject to EIA depending on their size and character,⁵¹ to very extensive amendments submitted by the European Parliament.⁵²

The latter focus on expanding the scope of EIA obligations to cover entire "national programmes", i.e. all projects serving a single objective;⁵³ a series of new categories of projects, more precisely defined than in the Commission proposal, including projects posing a threat to the marine environment, such as, crude-oil refineries, installations for the production of hydrocarbons at sea, and waste water treatment plants with a capacity exceeding 300,000 population equivalents;⁵⁴ as well as Community-funded projects in third countries, thereby importantly extending the area of application of the Directive outside European borders.⁵⁵ The European Parliament also proposed a clarification of the fact that projects requiring an EIA have to be made subject to a requirement for development consent, as well as establishment of follow-up and monitoring obligations on the part of national authorities during and after execution of an authorised project through continuous assessment of impacts.⁵⁶ Furthermore, it addressed the issue of quality of EISs by defining the factors that have to be assessed therein, as well as the qualifications and official approval of experts preparing them.⁵⁷ Finally, it attributed much importance to strengthening the role of the public in the EIA process, by proposing that an Advisory Council consisting of NGOs, citizens and consumers' associations, carries out, together with the competent authority, the 'screening' for Annex II projects; that the public is consulted on 'scoping'; and that it is informed on the effects and impact of the execution of projects.⁵⁸

The Commission incorporated some of the above, but importantly rejected, as excessively 'far-reaching' or not improving the existing formulas, public involvement in the 'scoping' and 'screening' processes, as well as the inclusion or the lowering of thresholds for certain types of activities in the Annexes.⁵⁹ Post-consent monitoring, as well as extension of the EIA procedure to

⁵¹ See Committee of the Regions, Opinion on the Proposal for a Council Directive amending Directive 85/337/EEC on the assessment of effects of certain public and private projects on the environment, 1995 *O.J.* (C 210) 78.

⁵² See EP, Opinion on the Proposal for a Council Directive amending Directive 85/337/EEC on the assessment of effects of certain public and private projects on the environment, 1995 *O.J.* (C 287) 83.

⁵³ See *ibid.*, Amend.19 and 21.

⁵⁴ *Ibid.*, Amend.42-56.

⁵⁵ *Ibid.*, Amend.84 and 39.

⁵⁶ *Ibid.*, Amend.32 and 36-37 respectively.

⁵⁷ *Ibid.*, Amend.25 and 30-31 respectively.

⁵⁸ *Ibid.*, Amend.26, 27 and 37 respectively.

⁵⁹ See EC Commission, Amended Proposal for a Council Directive amending Directive 85/337/EEC on the assessment of certain public and private projects on the environment, COM(95) 720 final, 94/0078 (SYN). The Commission maintained the same attitude after the European Parliament insisted on its main suggestions after the second reading, see EC Commission, Re-examined Proposal for a Council Directive amending Directive 85/337/EEC on the assessment of certain public and private projects on the environment, COM(96) 723 final, 94/0078 (SYN). On public
(continued...)

projects in third countries was not outright rejected, but rather delegated to other, in the Commission's view more relevant, Community instruments.

More specifically, the amended Directive, adopted in early 1997,⁶⁰ does extend the range of projects requiring an obligatory impact assessment; sets out clearer criteria to be applied when deciding whether Annex II projects should be submitted to impact assessment ('screening'),⁶¹ and tightens the procedures to be applied, among others, by requiring public consultation before consent is given rather than before building works start, and by laying down a public right to be informed of the criteria for Annex II projects requiring an EIA, any requests for development consent and decisions thereon. It also provides that, if the developer so requests, the authority responsible must give an opinion as to the content and exact scope of the information to be supplied on the basis of specifications in Annex IV ('scoping'). Most importantly, the new Directive tries to be consistent with the requirements of Directive 96/61 on integrated pollution prevention and control, introducing the possibility of a single procedure being applied to projects covered by both instruments (Art.2). Hence, prior impact assessment finds its proper place in an integrated process aiming at full consideration of environmental impacts and proper decision-making in Member States with far-reaching implications if properly implemented. The amended Directive also incorporates the obligations arising from the Espoo Convention (Art.7), and thus makes it binding to all Community states, despite its not having entered into force as yet. It remains to be seen whether the new instrument will affect in any substantial way the way the EIA procedure is being implemented in Member States, after March 1999 when the deadline for transposition expired.⁶²

8.2. Public Access to Environmental Information.

After environmental information has been produced, either by means of an EIA or in any other form, the next logical step is to make it accessible to the public. This serves both to increase

⁵⁹(...continued)

participation not only in the 'screening' and 'scoping' but also in the decision-making process, *cf.* Article 6 of the Aarhus Convention. For a discussion of the shortcomings of the final proposal and the instrument adopted, see W.M.Tabb, 'Environmental Impact Assessment in the European Community: Shaping International Norms', 73 *Tulane Law Review*, 1999, pp.923-60.

⁶⁰ As Council Directive 97/11.

⁶¹ It provides, e.g., for compulsory EIA for Annex II projects likely to have significant effect on special nature protection zones, on the conservation of wild birds, and of natural habitats of wild flora and fauna under the relevant Directives. Whether Annex II projects will require an EIA now depends on each project's characteristics (such as size, use of natural resources, production of waste, impact on natural and historical heritage) and the sensitivity of areas likely to be affected.

⁶² Note also that the Commission insists in its effort to move from individual projects to a more general strategic level and impose an EIA requirement government activities such as town and country planning, see EC Commission, Proposal for a Council Directive on the assessment of the effects of certain plans and programmes on the environment, COM(96) 511 final, 1997 *O.J.* (C 129) 14; and amended Proposal, COM(1999) 73 final. For a commentary see H.von Seht & C.Wood, 'The Proposed European Directive on Environmental Assessment: Evolution and Evaluation', 28(5) *Env't Pol. & L.*, 1998, pp.242-9.

environmental awareness and democratic control in general, and to document arguments before the administration or the courts in particular. However, unlike the EIA requirement, the notion of public access to environmental information has a much shorter and more modest history. In fact, it is only in the Western world that this concept has found its way into positive international law. The subsequent sections will accordingly discuss rights of access to environmental information endorsed in the Barcelona and other regional conventions and in the relevant Community instrument.

8.2.1. Regional Instruments on Public Access to Environmental Information.

The revised Barcelona Convention is indeed one of the few international instruments containing a relevant obligation.⁶³ Pursuant to it, the Mediterranean Parties have to ensure public access to information on the state of the environment in the field of application of the Convention and Protocols, on activities or measures adversely affecting it or likely to do so - which points to public involvement in EIA procedures -, and on activities carried out or measures taken in accordance with the Convention and Protocols (Art.15(1)); they also have to ensure that the opportunity is given for public participation in decision-making processes related to the field of application of the Convention (Art.15(2)). The right of access to environmental information is, nevertheless, qualified by the power of the Parties to refuse disclosure of such data on the grounds of confidentiality, public security or investigation proceedings, to the extent they justify their refusal and observe applicable international regulations (Art.15(3)).⁶⁴

It is notable that there is a conspicuous lack of reference to any form of 'active' information in the Convention, i.e. the requirement imposed on governmental organs to regularly produce environmental reports for the public, without the latter having to ask for it. Only in the revised Land-Based Sources Protocol, one comes across an obligation to make available to the public the findings of monitoring activities relating to levels of pollution, as well as to the effectiveness of measures undertaken (Art.8).⁶⁵

The inclusion of the said provisions in the Barcelona revision process reflects recent developments pointing towards wide-spread endorsement of the right of access to environmental information throughout the industrialised world, notably in the framework of the Council of Europe and the ECE. The first relates to the 1993 Council of Europe Convention on Civil Liability for

⁶³ See, e.g., also the 1992 ECE Transboundary Watercourses Convention, Art. 16.

⁶⁴ Cf. 1992 Paris Convention on the Protection of the Marine Environment of the North-East Atlantic, Article 9, whereby national authorities should make available any information in written, visual, aural or data-base form, on all their activities and measures that are likely to have an impact on the state of their maritime areas to "any natural and legal person".

⁶⁵ See also Mediterranean Commission on Sustainable Development - Recommendations and Proposals for action on the theme of: Information, Public Awareness, Environmental Education and Participation, UNEP, Report of the Eleventh Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, UNEP(OCA)/MED IG.12/9, 6 December 1999, Annex IV, Appendix I; and MAP Information Strategy, Appendix IV.

Damage Resulting from Activities Dangerous to the Environment (Dangerous Activities Convention).⁶⁶

This instrument provides for access to information on the lines of the EC Directive discussed in the next section (Chapter III). Pursuant to it, anybody may request public authorities or other bodies with public environmental responsibilities and under the control of a public authority to provide information relating to an activity that has caused or is threatening to cause damage. Moreover a person suffering damage may request the court to order the operator to provide specific information - a provision not to be found in the EC Directive -, including particulars of equipment and machinery used, the kind and composition of the dangerous substances or waste in question, and the nature of genetically modified organisms; however, such information might be denied if the request imposes a disproportionate burden on the operator in the light of the various interests involved. The latter may also refuse to provide material able to incriminate him, which seems to minimise the practical utility of this provision.

The second development is even more significant as it involves adoption of an international instrument dedicated specifically to the procedural rights considered in this Chapter. Building on the ECE Charter on Environmental Rights and Obligations which provides for individual access to administrative and judicial proceedings and participation in decision-making, and the ECE Guidelines on Access to Environmental Information and Public Participation in Environmental Decision Making,⁶⁷ the Fourth Ministerial Conference "Environment for Europe" (Aarhus, Denmark, 23-25 June 1998) finalised the text of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention).⁶⁸

The Aarhus Convention is the product of two years of intense negotiations.⁶⁹ It aims at establishing minimum procedural standards in ECE countries guaranteeing the public rights of access to information, participation in decision-making and access to justice, and, importantly, is the first international treaty endorsing in its operative part the right to the quality of the environment as a basic human right (Art.1).⁷⁰ Each Party to this instrument undertakes to adopt the necessary regulatory and other measures, as well as enforcement arrangements, to establish and maintain a "clear, transparent and consistent framework" in order to implement its provisions (Art.3(1)).

⁶⁶ For the civil liability arrangements under the Dangerous Activities Convention, see *supra*, Chapter 4, pp.163-5.

⁶⁷ ECE, *Guidelines on Access to Environmental Information and Public Participation in Environmental Decision-Making*, 1996.

⁶⁸ For an account of what took place during the Conference, see K.Brady, 'Aarhus Convention Signed', 28(3/4) *Env'l Pol. & L.*, 1998, pp.171-90.

⁶⁹ See J.Wates, 'The UN ECE Guidelines and Draft Convention on Access to Environmental Information and Public Participation in Environmental Decision making', in R.E.Hallo (ed.), *Access to Environmental Information in Europe - The Implementation and Implications of Directive 90/313/EEC*, 1996, pp.423-36.

⁷⁰ For a concise presentation of the main points of the Convention, see K.Brady, 'New Convention on Access to Information and Public Participation in Environmental Matters', 28(2) *Env'l Pol. & L.*, 1998, pp.69-75.

As far as access to environmental information is concerned, the Convention enacts the most detailed and advanced international regulation on the subject to date. The main points of the scheme envisaged are as follows: Public authorities in general - not confined to those that exercise environmental management *stricto sensu* (Art.2(2)) - have to make such information available to the public no later than two months after the relevant request, without an interest having to be stated, in principle in the form requested, and at a reasonable charge (Art.4(1), (2) and (8)).

Exceptions to this rule are allowed - in writing and adequately justified - for reasons of national defence and public security, protection of intellectual property, confidentiality of proceedings etc. that, nevertheless have to be interpreted restrictively (Art.4(4)). The most controversial exception relates to the confidentiality of commercial and industrial data (Art.4(4)(d)). After extensive discussion, the provision was watered down by adding "where this confidentiality is protected by law in order to protect a legitimate economic interest" and by defining an instance when confidentiality cannot be invoked, namely when the relevant information concerns emissions relevant to environmental protection.

This system is complemented by several detailed arrangements and principles that have to be respected by national administrations, and by an express undertaking to the effect that officials are required to support, i.e. guide and assist, the public in seeking access to information (Arts. 3(2) and 5(2)(b)(ii)),⁷¹ and that persons exercising their rights "shall not be penalized, persecuted or harassed in any way for their involvement" (Art.3(8)). Moreover, any person considering that his/her request for information has been ignored, wrongfully refused, inadequately answered, or otherwise not dealt with in accordance with the preceding provisions must be given access to an expeditious, inexpensive and binding review procedure before a court or another independent and impartial body established by law (Art.9(1)).

Public authorities have an additional independent duty to collect and disseminate environmental information, especially in case of threat to public health or the environment (Art.5(1)(a) and (c)). Mandatory systems for an adequate flow of information to public authorities about proposed and existing activities which may significantly affect the environment are in this context also called for (Art.5(1)(b)). In the long run, a comprehensive mechanism that will cover the whole territory of the state and will record environmental information in data bases easily accessible through public telecommunication networks, including reports on the state of the environment, texts of relevant legislation, policies, plans and environmental agreements, should be established (Art.5(3)). In any case, each Party undertakes to publish and disseminate a national report on the state of the environment at regular intervals (Art.5(4)). The only notable Guideline that did not find its way into the actual treaty is that requiring governments to "inform the public of the

⁷¹ Hence, for instance, when a public authority does not hold the information requested it is, nevertheless, required, as promptly as possible, to inform the applicant of the authority to which it believes the latter should apply or transfer the request to that authority and inform the applicant accordingly (Art.4(5)).

possibilities of submitting information to international bodies concerning non-compliance with international rules" (Guideline13).⁷²

It must, finally, be noted that NGO participation in the preparatory stages for this Convention was unprecedented, while several powerful states, including Germany and the US, persistently tried to do away with the most radical elements of the draft, and still did not sign the final text. That might seem strange for an agreement on procedures and not on the substance of environmental problems, but it is just an indication of the increased significance of empowering citizens and NGOs to demand full adherence to the multiplicity of national and international norms.⁷³

This type of tension created by public rights is certainly innovative for the Mediterranean region,⁷⁴ with the exception of the European Union area, where Council Directive 90/313 on public access to environmental information has broadly acknowledged and institutionalised relevant obligations.

8.2.2. Council Directive 90/313 on Public Access to Environmental Information.⁷⁵

Under this instrument, Member States have to ensure through appropriate regulations that environmental information, broadly defined as encompassing data on the state of water, air, soil, flora and fauna, land and natural sites, and on activities or measures adversely affecting or designed to protect these (Art.2(a)), is "effectively" made available to any natural or legal person - aliens included - upon request and without justification (Art.3(1)), albeit at a reasonable charge (Art.5).⁷⁶ The public authorities of each state are responsible to provide the information requested,⁷⁷ even if they do not actually hold it but could obtain it on demand from other, even private, sources; Article 6 further tries to cover environmental information held by privatised or private bodies exercising

⁷² See Brady, *op.cit.* n.70, p.71.

⁷³ It is illustrative of the very difficult negotiations that the provision on "review of compliance" with the Aarhus Convention (Art.15) is thought to be one of the weakest ever. It reads: "The Meeting of the Parties shall establish, on a consensual basis, *optional* arrangements of a *non-confrontational, non-judicial and consultative nature* for reviewing compliance with the provisions of this Convention. These arrangements shall allow for appropriate public involvement and may include the option of considering communications from members of the public on matters related to this Convention." See Brady, *op.cit.* n.70, p.73.

⁷⁴ See, e.g., El-Hadi Chalabi, *L'Algerie, l'Etat et le Droit (1979-1988)*, 1989, pp.235-54, for a discussion of restrictions on the press and consequently on access to information in Algeria. Cf. A.Bin-Nun, *The Law of the State of Israel: An Introduction*, 1992 (2nd ed.), pp.65-8, on the right to information and to form associations as set out in Israeli High Court Decisions, despite restrictions on the press.

⁷⁵ See, generally, L.Krämer, *Focus on European Environmental Law*, 2nd ed., 1997, Chapter 12; and Hallo (ed.), *op.cit.* n.69, esp.at Chapter 1.

⁷⁶ But see F.Sanchis Moreno, 'Spain', in Hallo (ed.), *op.cit.* n.69 p.244, for some examples of blatantly excessive charges for acquiring environmental information in Spain.

⁷⁷ A 'public authority' is "any public administration at national, regional, or local level with responsibilities, and possessing information, relating to the environment" with the exception of administrative bodies acting in a legislative or judicial capacity (Art.2(b)).

public functions,⁷⁸ and in some countries, for instance France, this is taken to include a whole range of bodies such as the Association of Architects, the General Company of Waters, or Hunting Federations.⁷⁹

If they fail to do so, they have to justify their denial (Art.3(4)), and individuals are guaranteed the right of appeal under the domestic legal system (Art.4). In fact, in some countries, for instance France, there is a separate administrative tribunal to deal exclusively with appeals in cases concerning access to information,⁸⁰ thus providing an *ad hoc* procedure that can overcome any possible deficiencies encountered in the general administrative system established in the country, such as the long tradition of bureaucratic secrecy, slowness, great costs etc.⁸¹ However, a study of the practice of French administrative courts to which an interested person can appeal in case the authority insists on denying certain information reveals that such recourse has seldom been successful.⁸²

These rights are also restricted by certain exceptions protecting legitimate interests in the confidentiality of public authorities proceedings, international relations, and national defence; public security; matters which are, or have been, *sub judice*, or under enquiry, or which are the subject of preliminary investigations; commercial and industrial confidentiality; confidentiality of personal data and/or files; material supplied by a third party without a legal obligation; and material, the disclosure of which would make it more likely that the environment to which it related would be damaged (Art.3(2)). Moreover, a request may be refused where it would involve the supply of an unfinished document or data or internal communications, or where the request is manifestly unreasonable or formulated in too general a manner (Art.3(3)). Some commentators deem that these exceptions are so broad as "to threaten to swallow the general rule in favour of access to environmental information".⁸³ It has indeed been proven that the relevant provisions are stretched and used to cover, for instance, information on emissions or discharges which is obviously the kind of data the Directive intended to be made available to the public.⁸⁴

The Directive additionally includes a watered-down version of 'active information',⁸⁵ it specifically provides that reports on the state of the environment be periodically published (Art.7),

⁷⁸ See R.E.Hallo, 'Directive 90/313/EEC on the Freedom of Access to Information on the Environment: Its Implementation and Implications', in Hallo (ed.), *op.cit.* n.69, p.10, and see pp.10-4, for a discussion of the various types of exceptions.

⁷⁹ See F.Pelisson & M.Prieur, 'France', in Hallo (ed.), *op.cit.* n.69, p.81.

⁸⁰ See *ibid.* pp.79-80. The French Commission for Access to Administrative Documents (CADA), which acts as a special tribunal of first instance, has during its first fifteen years (1978-1994) issued opinions on an impressive 25,000 cases, of which roughly 7% relate to the environment.

⁸¹ See Hallo, *op.cit.* n.78, p.17.

⁸² See Pelisson & Prieur, *op.cit.* n.79, p.84.

⁸³ Hallo, *op.cit.* n.78, p.11.

⁸⁴ See *ibid.* p.13.

⁸⁵ See *ibid.* p.18.

without further clarifications or restrictions, an obligation largely depending on the quality of the information gathered, and consequently on the sampling, monitoring and reporting systems in Member States.⁸⁶

Notwithstanding the extensive restrictions on special information, and the fact that the discretion each state has to adopt the practical arrangements needed to put the abstract right into effective use (Art.3(1)) has led to diverse degrees of changes in administrative practices and of resultant ease or difficulty in the actual exercise of the right in different Member States,⁸⁷ the material scope of the right is broad and far-reaching, as it covers all possible data, scientific, legal and political, and in any form. Hence, Member States were slow to transpose the Directive; almost half of the then twelve states failed to meet the thirty-month deadline, among them Greece and Spain were significantly late, while Italy adopted legislation in conformity with the minimum requirements of the Directive only in 1997.⁸⁸ In fact, from the four Mediterranean countries only France had already for many years in place legislation on public access to information formulated in even wider terms in some respects than those of the Directive, as well as a considerable body of relevant case law.⁸⁹

In some of the laggard countries, notably Greece and Spain, individuals tried to invoke the 'direct effect' doctrine, in view of the fact that this is one of the most obvious examples of environmental Directives attributing rights to individuals, but with limited success.⁹⁰ These two countries also figure among those having attracted the majority of complaints to the Commission for failing to properly implement the Directive.⁹¹ It is characteristic that in Spain, from a total of one hundred and fifty documented cases, only in 5% access to information was provided, while in an impressive 80% there was no reply by the administration to the relevant request.⁹² That is not to say

⁸⁶ See *ibid*, pp.21-2. In fact, from the four Mediterranean countries, only Spain seems to conform with this requirement, see Sanchis Moreno, *op.cit.* n.76, p.231.

⁸⁷ See *ibid*, p.15.

⁸⁸ See *ibid*, pp.5-7; and EC Commission, *op.cit.* n.42, p.45. In fact, Greece waited until the Commission began legal proceedings before adopting implementing legislation, while Spain had to review its legislation after the Commission began proceedings on the grounds that the said legislation did not properly implement the Directive. It must be noted that none of the proceedings opened have been pursued, see 1995 *O.J.* (C 254) 122. However, in 1998, the Commission opened new proceedings against Spain for incorrect transposal of the Directive (Case C-189/99, see EC Commission, Sixteenth Report on monitoring the application of Community law, COM(1999) 301 final, 9.07.1999, p.64; and EC Commission, Report from the Commission to the Council and the European Parliament on the experience gained in the application of Council Directive 90/313/EEC of 7 June 1990, on freedom of access to information on the environment, COM(2000) 400 final, 29.06.2000, p.7. On the Spanish experience, see Sanchis Moreno, *op.cit.* n.76, pp.225-48. On the situation with regard to access to environmental information in Italy, see M.Albrizio & P.Fantilli, 'Italy', in Hallo (ed.), *op.cit.* n.69, pp.175-82.

⁸⁹ In its present form since 1978, see Pelisson & Prieur, *op.cit.* n.79, pp.71-93. In other respects, however, pre-existing legislation was insufficient, as, for instance, it did not grant non-French citizens rights of access nor the right of appeal, see M.Wheeler, 'The Right to Know in the European Union', 3(1) *R.E.C.I.E.L.*, 1994, p.2.

⁹⁰ See Hallo, *op.cit.* n.78, p.7. On the activities of Spanish NGOs unsuccessfully invoking 'direct effect', see Sanchis Moreno, *op.cit.* n.76, pp.226 and 234-5. On the Greek experience, see *infra*, pp.355-8.

⁹¹ See Hallo, *op.cit.* n.78, p.20.

⁹² See Sanchis Moreno, *op.cit.* n.76, pp.242-3.

that in countries more advanced, as far as access to information held by the administration is concerned, citizens and NGOs do not continue to encounter obstacles, especially in view of extensive invocation of allowed grounds for denial practised in practically all EU states.⁹³ In fact, this notable tendency by government departments to adopt a very broad interpretation when allowing exceptions to the principle of disclosure is among the most common subjects of complaint, together with the refusal by national authorities to respond to requests for information, the time taken to reply, and demands for payment of unreasonably high fees.⁹⁴

Lastly, it must be noted that the Directive is subject to review after the Member States submit reports on their experience with its implementation (Art.8).⁹⁵ The Commission has recently issued the relevant report and intends to come up with a revision proposal which will deal with these provisions that have led to flawed implementation, by clarifying the definitions of information to be disclosed and of the public authorities required to disclose it, drawing exceptions more narrowly, shortening the time-limit for responding, clarifying the duty to give reasons for refusal, and strengthen the provision on active supply of information.⁹⁶ It is thus expected that the more progressive - in some respects - Aarhus Convention will exert some positive influence in the review process.⁹⁷

All said, it would be fair to conclude that, despite the existing legal framework, there are still considerable obstacles to free access to environmental information in Europe, and remarkably in the European Union as such.⁹⁸ It is characteristic that information held by the Commission itself or the Council of Ministers is only accessible through general rules of access to documents adopted pursuant to a relevant Declaration annexed to the Maastricht Treaty.⁹⁹ The Community organs, with the distinguished exception of the European Parliament (EC Treaty, Art.225),¹⁰⁰ do not seem to be any different than national bureaucracies in that confidentiality and secrecy also ranks high in their priorities.¹⁰¹ In fact, the Court of First Instance has already had the chance to rule on a case of refusal

⁹³ See, e.g., Pelisson & Prieur, *op.cit.* n.79, p.74, on the practice of the French administration.

⁹⁴ See EC Commission, *op.cit.* n.42, p.45

⁹⁵ These were due by 31 December 1996; however, only one was submitted within the deadline and the rest arrived only after the Commission started relevant infringement procedures, see EC Commission, 2000, *op.cit.* n.88, p.3.

⁹⁶ See EC Commission, 2000, *op.cit.* n.88, esp. at pp.102; and Hallo, *op.cit.* n.78, pp.20-1.

⁹⁷ See EC Commission, 2000, *op.cit.* n.88, pp.12 and 8-9; and R.E.Hallo, 'A Look Ahead', in Hallo (ed.), *op.cit.* n.69, pp.439-40; and Brady, *op.cit.* n.70, p.74.

⁹⁸ See generally R.E.Hallo, 'The EU Institutions', in Hallo (ed.), *op.cit.* n.69, pp.409-22.

⁹⁹ Declaration No.17 on the right of access to information annexed to the Final Act of the Treaty on European Union, 1992 *O.J.* (C 191) 101; and Declaration 93/730/EC on a Code of Conduct concerning public access to Council and Commission documents; Council Decision 93/731/EC on public access to Council documents, 1993 *O.J.* (L 340) 43; and Commission Decision 94/90/ECSC, EC, Euratom on public access to Commission documents, 1994 *O.J.* (L 46) 58.

¹⁰⁰ See Hallo, *op.cit.* n.98, pp.419-20.

¹⁰¹ Note that, at the Amsterdam Conference, the NGOs proposed a new Article 21 giving European citizens access to information, decision-making and justice as part of a general right to human development, and to amend Art.226 so that an individual bringing a complaint against a Member State would have access to all the files exchanged between the Commission and the Member State, see R.Hallo, *Greening the Treaty II: Sustainable Development for a Democratic* (continued...)

of information by the Commission in WWF UK v. Commission.¹⁰² Should the EU accede to the Aarhus Convention, the possibility is presented to drastically alter this picture, however, in view of the fact that the latter's definition of "public authorities" that are under the afore-mentioned obligations covers "the institutions of any regional economic integration organization... which is a Party to this Convention" (Art.2(2)(d)). In other words, the Community organs would eventually have to rearrange their procedures in order to bring them in line with what is required by the Aarhus instrument.

8.3. Public Access to Judicial and Administrative Remedies.

International law has been concerned with public access to national legal recourse in order to ensure compliance with international environmental law even less than with access to environmental information. In fact, it is more correct to say that it has since long established rights of equal access to the victims of various forms of transboundary pollution, but it has not touched upon the issue of public standing for environmental claims absent any transnational element. However, the rights of standing flow directly and complement the previously examined prerogatives, and as was argued in the previous Chapter represent the single most important missing element in order to make the national law model a truly effective tool for the enforcement of international environmental obligations. Therefore, this issue cannot be overlooked for much longer.

The gap has been, indeed, identified and appreciated by the international community,¹⁰³ as indicated in Agenda 21, Chapter 27.13, which reads: "Governments will need to promulgate or strengthen, subject to country specific conditions, any legislative measures necessary to enable the establishment of NGOs of consultative groups, and ensure the right of NGOs to protect the public interest through legal action." Still, not much has happened since 1992 in this respect either in the context of the general international or the Community legal order.

¹⁰¹(...continued)

Union: *Proposals for the 1996 Intergovernmental Conference*, 1995.

¹⁰² Case T-105/95, 1997 *E.C.R.*, p.II-313. The Court found that the Commission was entitled to refuse public access to documents related to infringement proceedings against a Member State but the relevant decision should adequately explain the reasons for the refusal, see S.Schikhof, 'Access to Environmental Information', 4(4) *Maastricht J. of Eur. & Comp.L.*, 1997, pp.386-94.

¹⁰³ On the desirability of promoting the access of individuals and NGOs to administrative and judicial procedures related to environmental matters, see UNEP, Meeting of Senior Government Officials Expert in Environmental Law for the Mid-term review of the Programme for the development and periodic review of environmental law in the 1990s, Observations and Recommendations regarding the Programme for the development and periodic review of environmental law in the 1990s, UNEP/ENV.LAW/3/3, 1996, at E.22; and, among others, M.Bothe, 'Compliance Control beyond Diplomacy - The Role of Non-Governmental Actors', 27(4) *Env'l Pol. & L.*, 1997, pp.293-7.

8.3.1. Public Access to Judicial and Administrative Remedies under Regional Instruments.

Rights of access to national courts to claim compensation for damage caused by transboundary pollution are thought to be established at least in the OECD region, and an emerging rule of global customary law.¹⁰⁴ The relevant regimes - reviewed in Chapter 5 - apply to accidental pollution incidents and relate to civil liability and compensation procedures, including redress for land-based pollution damage under the Montreal Guidelines and the ensuing Global Programme of Action, as well as some regional instruments, such as the Quito Protocol and the Paris Convention, but not the Mediterranean Land-Based Sources Protocol. However, when it comes to operational pollution, or more generally, to private or governmental failure to observe international obligations, international law remains silent.

In Europe, however, the Dangerous Activities Convention building on the civil liability regimes goes some way towards a more wholesome right of access. Article 18 allows any association or foundation which is dedicated to environmental protection and satisfies relevant domestic legal requirements to make certain requests to the courts or administrative authorities of a Party, for instance that a dangerous activity is prohibited, or that the operator be ordered to take measures to prevent an incident or damage, or to effect reinstatement. Nonetheless, reservations regarding non-acceptance of claims by environmental groups are explicitly permitted, which invalidates the binding force of that provision; in other words, the Parties may well retain their restrictive national rules on standing without being in breach of any international undertaking.

That instrument aside, the only move to improve the situation with regard to public access to justice only recently took place in the framework of the ECE with its Guidelines on Access to Environmental Information and Public Participation in Environmental Decision Making and culminated in the Aarhus Convention. In fact, access to justice, including a broad definition of standing, and support to NGOs, the media etc. so as to enable them to play an enhanced role in the enforcement of environmental laws were major sticking points in the negotiations that produced this instrument.¹⁰⁵ As we saw, Article 9 of the Aarhus Convention provides for the review of decisions related to requests for environmental information. What is more, each Party has to ensure that the public has access to a review procedure before a court or an equivalent organ to challenge the substantive and procedural legality of any decision, act or omission concerning public participation

¹⁰⁴ See, *supra*, Chapter 4, pp.156-66; and among others, A.-Ch. Nygård, *Transboundary Pollution - International Legal Standards on the Right to Take Action in National Courts*, 1993; Sands, *op.cit.* n.33, pp.158-60; and P.W.Birnie & A.E.Boyle, *International Law and the Environment*, 1992, p.198. Such rights may also be derived from existing human rights law through the principles of equal protection and non-discrimination found in the Universal Declaration of Human Rights (Art.7) and in the 1966 Covenant on Civil and Political Rights (Art.26), see Boyle, *op.cit.* n.9, p.62.

¹⁰⁵ See Wates, *op.cit.* n.69, pp.431-6; and ECE Committee on Environmental Policy - Working Group for the preparation of a draft convention on access to environmental information and public participation in environmental decision-making, *Draft Elements for the Convention on Access to Environmental Information and Public Participation in Environmental Decision-Making*, CEP/AC.3/R.1, Geneva, 11 April 1996.

in decision-making, as laid down in Article 6 (Art.9(2)). However, any person wishing to resort to this procedure has to prove either a "sufficient interest" or maintain "impairment of a right", when the law of the Party requires this as a precondition.¹⁰⁶

Moving beyond review procedures for the protection of the rights it establishes, the Aarhus Convention also requires each Party to ensure that the public has access to administrative and judicial procedures to challenge acts or omissions by both private persons and public authorities contravening provisions of its national environmental laws (Art.9(3)). However, it does not set any minimum standards with regard to the criteria that have to be met for a person to be given standing in such procedures; these are left exclusively to national law to define. Having said that, all the above arrangements have to result to adequate and effective remedies, including injunctif relief, and be fair, equitable, timely and not prohibitively expensive (Art.9(4)). Moreover, the Parties undertake to provide information to the public on access to administrative and judicial review procedures and even consider the establishment of appropriate assistance mechanisms to remove financial and other barriers to access to justice (Art.9(5)). Finally, these provisions are complemented by the duty to afford appropriate recognition and support to environmental NGOs under the national legal systems, and the general prohibition of persecution, penalisation or harassment against persons exercising rights attributed under the Convention.

Despite criticism expressed by environmentalists maintaining that it does not go far enough,¹⁰⁷ this is obviously a ground-breaking instrument, unique in its subject-matter in international environmental regulation so far. However, it is not in force nor likely to be soon and thus not permitting any conclusions on whether and to what degree it will affect procedural rules and principles in the countries of the region. Therefore, it would be an accurate description of the current situation to assert that today the issue of standing is exclusively defined by national legal rules,¹⁰⁸ and depends on political and social circumstances in each country and the resulting level of environmental awareness. To better illustrate how much any positive development at the international level was overdue, we will now turn to an examination of this issue in the context of the Community legal order.

¹⁰⁶ It is further defined that environmental NGOs that meet the requirements of national law shall be deemed to have a sufficient interest and rights capable of being impaired for the purposes of Article 9(2).

¹⁰⁷ Brady, *op.cit.* n.68, p.177 and 184.

¹⁰⁸ For a brief presentation of participation and information rights of environmental NGOs in France, see B.Dyssli, 'Information and Participation in French Environmental Law', in M.Führ & G.Roller (eds.), *Participation and Litigation Rights of Environmental Associations in Europe - Current Legal Situation and Practical Experience*, 1991, pp.19-24; in Spain, see Ch.Alvarez Baquarizo, 'Civic Participation in the Implementation of Environmental Legislation', in *ibid*, pp.35-8; in Italy, see C.Carruba, 'Participation Experience in Italy', in *ibid*, pp.127-8; and in Greece, see A.Kallia, 'Participation Rights of Environmental Associations in Greece', in *ibid*, pp.61-76.

8.3.2. Public Access to Justice under Community Law.

To start with, it is well-known that a complainant to the Commission is not given the procedural leeway to dispute a decision under Article 226, nor to initiate infringement proceedings.¹⁰⁹ According to Article 230, any natural or legal person may institute proceedings before the ECJ only against a Decision addressed to that person, or against an act in the form of Regulation or Decision addressed to somebody else,¹¹⁰ to the extent it is of “direct and individual concern” to the person challenging it. ‘Individual concern’ requires that the Community act affects the legal position of the latter due to a factual situation that singles it out in a way similar to the recipient of the Decision.¹¹¹ ‘Direct concern’ refers to the independence of the challenged act from any national implementing measure or, if such a measure is required, the lack of any discretion by the Member State in its adoption.¹¹² Accordingly, the ECJ has allowed recourse to persons challenging provisions of Directives that affect them ‘directly and individually’.¹¹³

Absent these conditions, anyone establishing an interest in the result of a case before the ECJ has a right of intervention.¹¹⁴ Additionally, if the national legal system gives standing in courts to NGOs, then the latter can intervene before the ECJ when a preliminary ruling has been requested by the national judge. Thus, for example, the German environmental group ‘Bund Naturschutz’ had the chance to present its submissions to the ECJ in relation to the application of the EIA Directive;¹¹⁵ the same can be envisaged with regard to Directive 90/313 which provides for recourse in case of rejection or insufficient response to a request for information. In view of the restrictive interpretation of Article 230, this is in practice the only possibility to date for an association aiming at protecting

¹⁰⁹ See the relevant case-law of the ECJ refusing standing to a third party to challenge the legality of the Commission’s use of discretion on whether to commence infringement proceedings, Case 246/81, Bethell v. Commission, 1982 *E.C.R.*, p.2277; Case 87/89, Société Nationale Interprofessionnelle de la Tomate (SONITO) v. Commission, 1990 *E.C.R.*, p.I-1981. It should be noted that the European Parliament has a right to intervene in proceedings before the ECJ, as well as to institute an action against the Council for failure to act, or an action for annulment, but only to the extent it is protecting its own prerogatives, see G.Bebr, ‘The Standing of the European Parliament in the Community System of Legal Remedies: A Thorny Jurisprudential Development’, 10 *YB of Eur.L.*, 1990, pp.171-207. Consequently, it cannot interfere with the enforcement of applicable rules in Member States in any substantial way.

¹¹⁰ In these instances, the Regulation is in reality a Decision, see Joined Cases 16 to 17/62, Confédération Nationale des Producteurs de Fruits et Légumes v. Council, 1962 *E.C.R.*, p.981; or contains measures addressed to specific persons, see case 30/67, Industria Molitoria Imolese, 1968 *E.C.R.*, p.171; or is akin to a wad of individual Decisions, see Joined Cases 103-109/78, Usines de Beauport, 1979 *E.C.R.*, p.17.

¹¹¹ See, among others, Case 25/62, Plaumann, 1963 *E.C.R.*, p.197; Case 169/84, Companie Française de l’Azote, 1986 *E.C.R.*, p.391; Case 206/87, Lefebvre v. Commission, 1989 *E.C.R.*, p.275; and Joined Cases C-429/92 and C-25/93, Assobacam, 1993 *E.C.R.*, p.I-3991. For a more liberal view, see Case C-358/89, Extramet, 1991 *E.C.R.*, p.I-2501.

¹¹² See Joined Cases 21 to 24/72, International Fruit Company, 1972 *E.C.R.*, p.1219.

¹¹³ See Case C-298/89, Gibraltar v. Council, 1993 *E.C.R.*, p.I-3605; and B.Χριστιανός, ‘Η Συμβολή του ΔΕΚ στην Εφαρμογή της Πολιτικής Περιβάλλοντος - Η Περίπτωση των Ομαδικών Προσφυγών’ [V.Hristianos, ‘The Contribution of the ECJ to the Application of the Environmental Policy - The Case of Class Actions’], *Νόμος και Φύση* [Law and Nature], Vol.2(1), 1995, p.33.

¹¹⁴ According to Article 37 of the Protocol on the Statute of the Court of Justice of the European Economic Community; see also Joined Cases 16-17/62, *loc.cit.* n.110, p.937.

¹¹⁵ See Case C-396/92, Bund Naturschutz in Bayern NV, 1994 *E.C.R.*, p.I-3717.

the collective interest of its members, and *a fortiori* the general public interest, to be given some type of standing before the ECJ.¹¹⁶

In fact, the Court does not seem to be willing to change this attitude: In the recent Greenpeace case,¹¹⁷ the Court of First Instance reaffirmed that a third party can contest a Decision, only if he is able to prove that he is affected by it in a manner which differentiates him from all other persons. In this connection, where interests linked to environmental protection are involved, the mere existence of harm suffered or to be suffered cannot confer *locus standi* on an applicant if it is such as to affect, generally and in the abstract, a large number of persons who cannot be determined in advance in a way that distinguishes them individually in the same way as the addressee of a Decision; moreover, that conclusion cannot be affected by the fact that in the practice of national courts in matters relating to environmental protection *locus standi* may depend merely on the applicants' having a 'sufficient' interest.

However, the Court further held that 'special circumstances' such as the role played by an association in a procedure which led to the adoption of an act within the meaning of Article 230 may justify holding admissible an action brought by an association whose members are not directly and individually concerned by the contested measure. This leaves at least some scope for a future relaxation of the rules on standing; it remains to be seen whether the ECJ will proceed in that direction in its forthcoming decision on the appeal filed by Greenpeace or on some other occasion.

National legal orders are even more reluctant to alter their traditional principles on standing, and the ECJ has not proved willing to interfere with them to the extent the principle of effective judicial protection is not frustrated.¹¹⁸ It is illustrative in this connection that it often happens that citizens are denied access to national courts to challenge infringements of the EIA Directive on the grounds that they cannot prove special interest in the matter.¹¹⁹ The Council has indeed expressed its awareness that this is an area where Community initiatives must be undertaken. To this effect it has called on Member States to consider appropriate mechanisms to deal with complaints of citizens and NGOs regarding non-compliance with environmental legislation and on the Commission to submit a report on the existing administrative and judicial mechanisms, including access to justice, and to assess whether there is a need for the development of minimum criteria or guidelines regarding the handling of complaints both at national and at Community level and improved access to courts and administrative tribunals by non-governmental organisations and/or citizens with a view to encouraging the application and enforcement of Community environmental legislation, in the

¹¹⁶ See, e.g., Joined Cases 16 to 17/62, *loc.cit.* n.110, p.901.

¹¹⁷ Case T-585/93 (Court of First Instance), Stichting Greenpeace Council and others v. Commission, 1995 *E.C.R.*, p.II-2205; upheld on appeal, Case C-321/95, Judgment of 2 April 1998.

¹¹⁸ See Joined Cases C-87 to 89/90, A.Veholen and others v. Sociale Verzekeringsbank, 1991 *E.C.R.*, p.I-3757, at para.23.

¹¹⁹ See EC Commission, *op.cit.* n.42, p.48.

light of the subsidiarity principle and taking into account the different legal systems of the Member States.¹²⁰ The Commission is actually working on relevant proposals.¹²¹

Having examined the three most important types of procedural rights and corresponding duties from the perspective of international law, it is interesting to see how the courts in a particular jurisdiction have accommodated these rather innovative ideas. The example taken is again from the Greek jurisprudence.

8.4. Procedural Rights in Greek Jurisprudence - A Case Study.

The Greek Council of State, faithful to its 'green' tradition, has developed a consistently progressive case-law with regard to environmental impact assessment requirements, which goes a long way in rectifying deficient application of the EIA Directive in Greece.¹²² In this context, it has in principle accepted the 'direct effect' of certain provisions of the Directive after the deadline for implementation had passed without transposition,¹²³ and it has annulled administrative acts regarding projects for which no EIA had been undertaken prior to their commencement,¹²⁴ meaning not only material work but also the issuing of any preparatory administrative act, including choice of site,¹²⁵ even if the project commenced before the EIA Directive and/or the implementing national legislation came into effect.¹²⁶

The relevant case law also examines the legality of prior EIA actually undertaken, adopting an exacting attitude towards the administration, be it in relation to formalities, such as the participation of certain Ministries in the approval of environmental conditions,¹²⁷ or, more

¹²⁰ See EU Council, Resolution of 7 October 1997 on the drafting, implementation and enforcement of Community environmental law, 1997 *O.J.* (C 321) 1, at para.24-26. See also E.Rehbinder, 'Locus Standi, Community Law and the Case for Harmonization', in H.Somsen (ed.), *Protecting the European Environment - Enforcing EC Environmental Law*, 1996, pp.151-66.

¹²¹ And it is even considering financial and technical assistance for increasing awareness in Community environmental law by judges, lawyers and officials of the Member States, see EC Commission, *op.cit.* n.44, pp.10-3 and 22.

¹²² In fact, it only once departed from this route, when it ruled that the EIS submitted with the application for authorisation of extending the installations of a refinery also covered consent for commencement of operation, Decision 53/1993, *Νόμος και Φύση* [Law and Nature], Vol.1, 1994, p.290.

¹²³ See Decision No.2586/1992, *Ελλην.Επιθ.Ευρ.Δικαίου* [Greek Review of European Law], 1994, p.438. In this case, the Council eventually found that the project in question fell under Annex II, and hence the state had the scope to define whether it was covered by an EIA requirement.

¹²⁴ See, e.g., Council of State, Decision No.1035/1993, *Αρμενόπουλος* [Armenopoulos], Vol.5, 1993, p.473, regarding construction of a major circular highway near Athens; and Nos.1675 and 1676/1993, unreported, concerning a water supply project in Kefalonia.

¹²⁵ See Council of State, Decision No.1520/1993, *Νόμος και Φύση* [Law and Nature], Vol.1, 1994, p.209; and 2829/1993, *Νόμος και Φύση* [Law and Nature], Vol.2, 1994, p.471-8, both concerning the siting of waste water treatment plants.

¹²⁶ See, e.g., Council of State, Decision No.37/1993, *Νόμος και Φύση* [Law and Nature], Vol.1, 1994, p.219, regarding extension of the Chios airport.

¹²⁷ See Council of State, Decision No.1872/1994, *Νόμος και Φύση* [Law and Nature], Vol.2(2), 1995, p.508.

importantly, to the substance of the assessment. The Council has, importantly, held that the aim of the EIA process is to inform the competent authorities on the specific impact of the proposed project so as to enable them - in the spirit of the preventive approach - to decide whether the activity is permissible, and possibly impose appropriate conditions.¹²⁸ What is more, the Council has held that EISs have to consider the alternatives to the proposed works and be satisfied that the latter are indeed the most environmentally friendly solutions.¹²⁹

One of the cornerstones of the Council of State's jurisprudence is its decision on the diversion of the Acheloos river.¹³⁰ This was a major composite project involving several dams and interventions on the biggest watercourse in the country with multiple repercussions on the natural and man-made environment. The Council significantly found that this overall impact does not equal the aggregate of the impact of each separate work, but is rather multiplied due to the dynamic, non-linear character of the interdependent ecosystems that will be affected. Consequently, it ruled on the desirability of a composite and comprehensive study of the highest scientific standard, requiring a great amount of expertise, that would reveal the overall consequences of the project in order to satisfy the quality requirements of a meaningful assessment and an informed subsequent decision.

As far as public access to environmental information is concerned, Greece was characteristically late in transposing Directive 90/313, notwithstanding existing constitutional and legislative provisions establishing some relevant rights.¹³¹ In response, a group of Greek environmental NGOs invoked the doctrine of 'direct effect' in support of their claim that they had a right to obtain data in relation to the diversion of Acheloos river, without awaiting for transposition. In a ground-breaking judgment, in 1995, the Fifth Division of the Greek Council of State indicated its willingness to come in defence of public rights of access to environmental information.¹³² The case at hand concerned a petition of three NGOs, namely the WWF Greece, the Greek Ornithological Society, and the Greek Society for the Protection of the Environment and Cultural Heritage, against the Minister of Industry, Energy and Technology. The petitioners sought to annul an act of the Director of Water Potential and Natural Resources, issued under instructions of the said Minister in response to a request for statistical hydrological data on certain watercourses. In this act it was claimed that the Ministry was not in possession of the relevant information, and it was suggested that certain research bodies be approached.

The Court considered Directive 90/313, together with a relevant piece of national legislation predating the former, and found that:

¹²⁸ See Decision No.1520/1993, *loc.cit.* n.125.

¹²⁹ See Council of State, Decision No.1035/1993, *loc.cit.* n.124.

¹³⁰ Council of State, Decision Nos.2759 and 2760/1994, *Νόμος και Φύση* [Law and Nature], Vol.2(1), 1995, p.162.

¹³¹ See V.Dorovinis, 'Greece', in Hallo (ed.), *op.cit.* n.69, pp.111-4.

¹³² Council of State, Decision No.3943/1995, unreported.

“...With the above-mentioned Directive, Member States are obliged to introduce in their internal law provisions establishing an obligation of the administrative services, central and peripheral, as well as of the local authorities, to provide any natural or legal person submitting a relevant request with information... contained in documents, or other elements in visual, audio or computer form, irrespectively of whether these documents or elements have been issued, compiled or produced by the afore-mentioned services or are merely filed with them... It follows that the result pursued by the Directive is only partially guaranteed by the provisions of the Greek Law, and specifically to the extent it concerns provision of information derived from public documents. Therefore, it is not necessary to introduce special new provisions of internal law so as to comply with the Directive to that extent. On the contrary, the Directive’s mandate is not covered to the extent it refers to an obligation of provision of information on the basis of documents not issued or compiled in the above services, but merely filed with them, or of elements in visual, audio or computer form being at the disposal of these services. In view of the fact, however, that the obligation stemming from the Directive is not dependent on pre-conditions at the discretion of Member States, which may simply provide for a possibility to refuse information in certain cases and regulate the means by which information will be provided to interested persons, and, moreover, the exact obligation of Member States flows from the Directive itself, any interested person has the right to invoke the provisions of the Directive in order to base directly on them his claim of access to data... The refusal of the [said] Directorate is not legitimate, because... it was itself under a duty to provide the requested data to the petitioners [inasmuch as it is responsible for co-ordinating the research activities of a multiplicity of public sector services], even if they are not among those kept at that Directorate, since under such circumstances it should take steps with a view to acquiring the relevant data...”

This Decision, coupled with the Commission initiating infringement proceedings, prompted a Joint Ministerial Decision to implement the Directive, five years after the latter’s adoption and more than two years after the deadline had expired.¹³³

Turning now to the issue of standing, in Greece capacity to litigate is attributed to natural and legal persons as well as groups of persons not possessing corporate legal personality, to the extent their lawful interests are prejudiced. Although this interest must be ‘personal, direct, and existent’, the Greek Council of State has shown a notably early willingness - since the 70s - to accept environmental or other NGOs’s ‘lawful interest’ to challenge a large variety of administrative decisions.¹³⁴ Thus, the Athens Society of Friends of the Trees was deemed to have a lawful interest in the annulment of an authorisation to build a shipyard in the Pylos Bay, hundreds of kilometres away from the association’s base, on the grounds that the latter’s objectives covered protection of wildlife, places of outstanding natural beauty, plants and trees, the Greek countryside and the environment in general.¹³⁵ In another judgment, the Lawyers’ Association of Volos was found to have a legal interest in the annulment of an authorisation to expand a factory in the vicinity of the

¹³³ No.77921/1440/6.9.95 on the freedom of citizen access to the public authorities for information relating to the environment, *Official Gazette* 795B’, 14/9/1995. The instrument closely follows the requirements and even the wording of the Directive, but -surprisingly- requires the person requesting information to show a legal interest! It additionally establishes a right of appeal to a Special Commission, which until 1997 had not been set up.

¹³⁴ As well as the rather better established interest of local government, see, e.g., Council of State, Decision No.2755/1994, *Νόμος και Φύση* [Law and Nature], Vol.2(2), 1995, p.487.

¹³⁵ Council of State, Decision No.810/1977, unreported.

city, on the basis of the former's competence to discuss and pronounce on any issue with national or social implications, including protection of the natural and cultural environment in order to prevent deterioration in the quality of life.¹³⁶ In fact, it is conceded among Greek lawyers that in administrative judicial proceedings related to the protection of the environment, the Council's attitude towards standing has permitted a *quasi actio popularis*.¹³⁷

It should be noted in this context, that this stance has exerted influence on the environmental awareness of the Greek judiciary as a whole, which now treats leniently even violent confrontations between environmental activists and polluting corporations, as, for instance, in the case of Greenpeace members acquitted in relation to the occupation of an oil refinery; this action in fact led to the imposition of heavy fines for pollution incidents that triggered the activism in the first place.¹³⁸

8.5. New Trends in Regional Free Trade Arrangements - The NAFTA Side-Agreement on Environmental Co-operation.

It must be evident by now that harmonisation of domestic administrative and judicial procedures and close supervision by the international community of their effective application is a very ambitious task, bound to face considerable resistance on the grounds of state sovereignty and independence. However, the North American Agreement on Environmental Co-operation (NAAEC), adopted in 1993, points to the emergence of such a trend. This instrument was understandably concluded in an area where economic co-operation, or even integration, is advanced to a considerable degree, a factor that creates the necessary legal conditions and political trust to allow such developments.

NAAEC is a side-agreement of NAFTA, arguably the most environmentally sensitive trade agreement to date,¹³⁹ as it upholds explicit environmental objectives, significantly including that of "strengthen[ing] the development and enforcement of environmental laws and regulations" (Preamble); and committing its Parties to sustainable development and high-level environmental

¹³⁶ Council of State, Decision No.4576/1976, unreported.

¹³⁷ See, e.g., K.Μενουδάκος, 'Προστασία του Περιβάλλοντος στο Ελληνικό Δημόσιο Δίκαιο. Η Συμβολή της Νομολογίας του Συμβουλίου της Επικρατείας' [K.Μenoudakos, 'Protection of the Environment in Greek Public Law. The Contribution of the Jurisprudence of the Council of State'], *Νόμος και Φύση* [Law and Nature], Vol.4(1), 1997, p.19.

¹³⁸ See Greek newspaper *To Vima*, 13 April 1997, p.A41.

¹³⁹ See, among others, R.Housman, 'The N.A.F.T.A.'s Lessons for reconciling Trade and the Environment', 30 *Stanford J. of Int'l L.*, 1994, pp.379-422; T.L.Anderson (ed.), *NAFTA and the Environment*, 1993, and especially P.M.Emerson & R.A.Collinge, 'The Environmental Side of North American Free Trade', pp.45-60; M.J.Spaulding, 'Transparency of Environmental Regulation and Public Participation in the Resolution of International Environmental Disputes', 35 *Santa Clara L.Rev.*, 1995, pp.1129-31; B.J.Condon, 'NAFTA and the Environment: A Trade-Friendly Approach', 14 *NW J. of Int'l L. & Bus.*, 1994, pp.528-41; and F.M.Abbott, 'The NAFTA Environmental Dispute Settlement System as a Prototype for Regional Integration Arrangements', 4 *YB.I.E.L.*, 1993, pp.3-29, esp.at fn.3 where relevant literature is cited.

protection, not only maintaining existing environmental standards (Chapter 7B), but also prohibiting their lowering and allowing enactment of only more stringent ones (Arts.905 and 713). What is more important for present purposes is that NAFTA aspires towards future upward harmonisation of environmental laws (Arts.713-714 and 905-906) and adoption of existing or emerging international standards (Arts.712(1) and 905(1)), and preserves the right/duty to enforce environmental treaty obligations listing relevant instruments that supersede NAFTA, and the ensuing free-trade regime, in case of inconsistency (Art.104).¹⁴⁰

Building on these achievements and in order to appease the NAFTA critics,¹⁴¹ the environmental side-agreement provides for future formulation of commonly agreed standards by the trilateral North American Commission for Environmental Co-operation (NACEC).¹⁴² That aside, it explicitly sets procedural standards related to the domestic enforcement of already existing national environmental law (Arts.5-7). This is an unprecedented - even by European Community standards - intrusion in the internal legal domain, which solemnly acknowledges that protection of the domestic environment is indeed an international concern.

More specifically, the central obligation undertaken in this agreement is that each Party must "effectively enforce its environmental laws", through appropriate government action, such as appointing and training inspectors; monitoring compliance and investigating suspected violations; seeking assurances of voluntary compliance and compliance agreements; publicly releasing non-compliance information; promoting environmental audits; requiring record keeping and reporting; providing or encouraging mediation and arbitration services; using licences, permits or authorisations; initiating judicial and other proceedings to seek appropriate sanctions or remedies; providing for search, seizure or detention; issuing administrative orders, including orders of a preventative, curative or emergency nature etc. (Art.5(1)). The Parties have, thus, considerable freedom to choose the means that are most appropriate for their own legal system, but are in any case committed to ensure availability of enforcement proceedings, and appropriate sanctions (Art.5(2)-(3)).

Private access to remedies is also guaranteed (Arts.6-7), and in particular rights to sue for damages; to seek sanctions or remedies such as monetary penalties, emergency closures or orders to mitigate the consequences of violations; to request the competent authorities to take appropriate enforcement action; and to seek injunctions where a person suffers loss, damage or injury as a result

¹⁴⁰ Namely CITES, the Montreal Protocol, the Basel Convention, and certain bilateral agreements between North American states. For a discussion of Article 104's implications, see Housman, *op.cit.* n.139, pp.398-400.

¹⁴¹ On the drafting history of the environmental provisions of NAFTA, see *ibid*, pp.380-394.

¹⁴² See, among others, S.C.Fulton & L.I.Sperling, 'The Network of Environmental Enforcement and Compliance Cooperation in North America and the Western Hemisphere', 30(1) *The International Lawyer*, 1996, pp.111-40; Spaulding, *op.cit.* n.139, pp. 1131-41; Condon, *op.cit.* n.139, pp.541-8; and Housman, *op.cit.* n.139, pp.412-9. The Secretariat is composed of independent members, as opposed to government officials sitting in the NACEC's Council. In addition, there is a Public Advisory Committee of five non-governmental persons from each Party that is called upon to give advice.

of conduct contrary to environmental laws or tortious conduct (Art.6(3)). However, these rights pertain to persons "with a legally recognized interest under... [the Party's] law in a particular matter"; in other words, the national rules of standing are not interfered with, nor is access to legal proceedings given to aliens.¹⁴³ This is a crucial weakness in a system aspiring to empower the public so as to defend environmental goods, inasmuch as it does not affect jurisdictions that restrict access to legal recourse by not acknowledging relevant interests to the public at large.

Moreover, NAAEC includes ground-breaking provisions for recourse to international institutions to redress state failures related to enforcement operating at two levels. The first significantly involves the public: NGOs and individuals may present the Secretariat of the NACEC with submissions with regard to a Party's failure to enforce its environmental law.¹⁴⁴ The Secretariat then decides on whether the submission warrants a response, i.e. whether it alleges harm to the person making the submission, concerns issues whose further study would advance the purposes of the regime, that private remedies under the Party's law have been pursued, and whether the submission is drawn exclusively from media reports (Art.14(2)), and may request the Party concerned to respond. Eventually it may prepare a factual record for submission to the Council, which may then make it publicly available (Arts.14-15).¹⁴⁵ It must be stressed, however, that this procedure does not automatically activate the formal dispute settlement process; in other words, the challenge to a government's enforcement failure may well be exhausted after the steps described above have been taken unless another Party to the agreement takes up the issue and initiates the second level of compliance control, to which the public - remarkably - has no access at its own initiative.¹⁴⁶

At this second level, any Party may request consultations with regard to another state's persistent failure to enforce its environmental laws (Art.22). This important recognition of other countries' legitimate interest in the observance of domestic environmental legislation is tempered, however, by the caveat that the alleged enforcement failure must relate "...to a situation involving workplaces, firms, companies or sectors that produce goods or provide services: (a) traded between the territories of the Parties; or (b) that compete, in the territory of the Party complained against, with goods or services produced or provided by persons of another Party" (Art.24). This means that the international concern is limited only to economic activities, thus excluding a wide spectrum of other areas where environmental enforcement is desirable and largely deficient, and especially those

¹⁴³ See Housman, *op.cit.* n.139, p.413.

¹⁴⁴ This seems particularly significant for Mexicans complaining that they have not adequate access to their own government for such matters, see Condon, *op.cit.* n.139, p.543.

¹⁴⁵ On the three submissions that have reached the NACEC, see M.J.Kelly, 'Bringing a Complaint under the NAFTA Environmental Side Accord: Difficult Steps under a Procedural Paper Tiger, but Movement in the Right Direction', 24 *Pepperdine Law Review*, 1996, pp.71-97; K.Raustiala, 'International "Enforcement of Enforcement" under the North American Agreement on Environmental Cooperation', 36 *Virginia J.I.L.*, 1996, pp.721-63; and P.M.Johnson, 'The Commission for Environmental Co-operation and the Cozumel Case', 6(2) *R.E.C.I.E.L.*, 1997, pp.203-7.

¹⁴⁶ See Abbott, *op.cit.* n.139, pp.10-1, where he submits proposals with a view to departing from these traditional intergovernmental practices.

bearing on state interventions and activities affecting environmental assets. Moreover, a potentially powerful defence is available, namely that the challenged action or inaction has resulted "from *bona fide* decisions to allocate resources to enforcement in respect of other environmental matters determined to have higher priorities" (Art.45(1)). It is difficult to envisage an international - or domestic, for that matter - organ questioning or dismissing any relevant submissions by a responsible government.

Bearing these restrictions in mind, if negotiations prove abortive, any Party may resort to the Council for resolution (Art.23). Should the matter still remain unresolved, and if it falls under certain categories, it may be referred to an expert Arbitral Panel, which produces a final report that the Parties involved are to implement by means of an agreed action plan (Art.33).¹⁴⁷ If the latter is in turn not properly implemented, the Panel can be reconvened and impose "a monetary enforcement assessment" (Art.34).¹⁴⁸ This penalty is designed to be paid into a fund which will contribute at the direction of the Council to improved environmental protection or law enforcement in the Party complained against (Annex 34(3)). Failure to pay that fine brings about the possibility of the Panel, or subsequently the other Party concerned, deciding suspension of NAFTA benefits for the culpable Party (Arts.35-36).¹⁴⁹ In this connection, it has been suggested that a Party may well opt for paying the rather symbolic fine that will in any case return home through the above-mentioned fund,¹⁵⁰ or even suffer trade sanctions rather than implement Panel decisions, and that the whole process needs to acquire a more binding character.¹⁵¹ At the same time, however, it is conceded that countries, such as the US and Mexico, have been traditionally suspicious of international adjudication or intrusions on their sovereign prerogatives, which implies that any 'stronger' system would be unlikely to be agreed upon or ultimately tolerated and put into effect.¹⁵²

The NACEC is not only a dispute-resolution *forum*, but also, and certainly more often, an organ entrusted with the day-to-day task of promoting co-operation in environmental enforcement (Arts.10(4)), through various actions and initiatives, as e.g. the compilation of an annual report of data on each Party's enforcement activities (Art.12). In that context, the Commission has, since 1995, established a standing North American Enforcement and Compliance Work Group, composed

¹⁴⁷ The dispute settlement procedure established by the side agreement has been castigated as 'Byzantine', because of its elaborate and lengthy character, see *ibid*, p.8. In this respect, one must not forget that most international dispute settlements procedures present the same characteristics in order to ensure that the parties to a conflict have both the procedural guarantees and the time to de-escalate and resolve their differences.

¹⁴⁸ Currently at 0.007% of the total trade between the Parties during the most recent year for which data is available (Annex 34(1)).

¹⁴⁹ More specifically, for the USA and Mexico the monetary assessment may be recouped through trade sanctions, whereas for Canada, it may be recouped through the Canadian courts, see Arts.22-36A.

¹⁵⁰ See Abbott, *op.cit.* n.139, p.16.

¹⁵¹ See *ibid*, pp.11-2.

¹⁵² See *ibid*, p.13; and p.28, where the author contemplates NAFTA evolving on the European Union lines towards greater integration with consequent concessions of sovereign authority.

of environmental enforcement officials from the three countries.¹⁵³ Hence, the primary role that the new structures play is one of closer partnership in order to enhance enforcement efforts in the US, Canada and Mexico.¹⁵⁴

To sum up, in the framework of NAAEC both domestic and international public *fora* are made available for the resolution of conflicts regarding compliance with environmental regulations. One should not forget that this has been made possible on the basis of a long history of bilateral efforts at co-operating with a view to environmental protection, and more specifically enforcement actions in the region.¹⁵⁵ Although it has been suggested that the terms of the side-agreement have the character of non-binding political commitments rather than hard law,¹⁵⁶ which makes their implementation heavily dependent on the political will of governments, and "on the priority the citizens of each country assign to environmental issues",¹⁵⁷ even those adopting a sceptical stance concede that citizens' access to judicial and administrative proceedings for enforcement of environmental laws is a most significant improvement to NAFTA.¹⁵⁸ Despite criticism expressed so far that the NACEC adopts a formalistic stance and to date proved reluctant to pursue any of the cases brought before it,¹⁵⁹ there is ample space to translate these innovative arrangements into actual practice. Then the way is arguably open for a new promising era of international control over compliance with international - as well as national - environmental law, which will combine non-compliance procedures administered within the institutions set up in various international environmental regimes, with expanding internationally agreed determination of domestic implementation and enforcement procedures and respective rights and duties.

8.6. Concluding Remarks.

In this Chapter we saw that international environmental law - with the pioneering influence of Community regulation - has already gone some way towards establishing public rights of a procedural nature that operate domestically and bring the public into the law-making and law-

¹⁵³ See Fulton & Sperling, *op.cit.* n.142, p.131.

¹⁵⁴ Indeed, it is envisaged that this system will eventually expand to cover the whole of the Americas, *ibid.* pp.138-40; and Abbott, *op.cit.* n.139, p.17.

¹⁵⁵ For a review of this history, see Fulton & Sperling, *op.cit.* n.142, pp.116-27.

¹⁵⁶ And that it is "riddled with textual weaknesses and hortatory enforcement provisions", see e.g., M.J.Kelly, 'Overcoming Obstacles to the Effective Implementation of International Environmental Agreements', 9 *The Georgetown International Environmental Law Review*, 1997, p.480.

¹⁵⁷ See Condon, *op.cit.* n.139, p.542.

¹⁵⁸ See, for instance, M.S.H.Cho, 'Private Enforcement of NAFTA Environmental Standards through Transnational Mass tort Litigation: The Role of United States Courts in the Age of Free Trade', 27 *St.Mary's L.J.*, 1996, p.831; and Spaulding, *op.cit.* n.137, p.1133-6. For critical views, see also D.D.Coughlin, 'Comment, The North American Agreement on Environmental Cooperation: A Summary and Discussion', 2 *Mo.Env't L. & Pol'y Rev.*, 1994, p.93.

¹⁵⁹ See J.Coatney, 'The Council on Environmental Cooperation: Redaction of "Effective Enforcement" within the North American Agreement on Environmental Cooperation', 32 *Tulsa Law Journal*, 1997, pp.823-42.

enforcement process. The right to participate in EIA procedures and that of access to environmental information are the ones most widely accepted and practised, especially in the most developed countries, albeit with considerable obstacles. The same cannot be said for the right of access to administrative and judicial proceedings, which still to date remains a matter exclusively governed by national law, save in the area of transboundary pollution damage.

More specifically, environmental impact assessments prior to the issuing of permits for any project likely to affect the marine environment are today a mandatory requirement, even absent transnational elements. Entry into force of the Espoo Convention will probably accelerate the application of the principle in other areas of environmental protection, and will stimulate the proliferation of relevant procedures not only among its Parties but also in other parts of the world, and especially Africa and the rest of the Mediterranean region. Nevertheless, the European experience with implementation of the EIA Directive shows that a legal framework is not in itself enough to guarantee that this procedure will have the intended impact on decision-making nor that the public will be involved in a meaningful way.

As far as public rights of access to information are concerned, these have not yet been sufficiently embedded in the day-to-day practice of national administrations even in the EU countries where they have been introduced since the early 90s. Nevertheless, the adoption of the Aarhus Convention has the potential to inform and reinforce the existing legal arrangements in Europe and influence the legislation of other countries as well.

This instrument is very significant in another respect: it is the only international agreement to date whereby states undertake to establish at least minimum rights of access to justice for their citizens and NGOs for the purpose of enforcing environmental legislation, irrespective of damage suffered. Relevant developments are also expected in the context of Community law, where as yet there is no recognition of a broad definition of standing that would accommodate collective interests either before the ECJ or domestic judicial and administrative *fora*.

The trend towards increased intrusiveness of international law is also reflected in the North American Agreement on Environmental Co-operation. The central object of regulation therein are state obligations to effectively enforce national environmental legislation, coupled by the establishment of procedures for public recourse to both national and international institutions to redress relevant failures. This represents the clearer admission so far that the method and effectiveness of environmental enforcement within state borders is a legitimate international concern, and is in fact a corollary of international regulation of the domestic environment.

Having said that, one must never lose sight of the fact that the EU and NAFTA are political and economic integration systems, which allows them to develop mechanisms that deeply interfere with the reserved domain of national procedural rules. In the Mediterranean, the envisaged integration process in the context of the 'Euro-Mediterranean partnership' - extensively discussed

in Chapter 6 - makes a comparable evolution possible as well as desirable. In other words, the 'export' of environmental conditions from the Community to third countries in the region, linked to funding and development co-operation, already taking shape is perfectly capable of eventually encompassing procedural requirements as well.

However, another caveat is necessary in this connection: NGOs in developing countries are only just emerging as active participants;¹⁶⁰ what is more, procedural rights might be just a theoretical notion in countries where democratic institutions are lagging behind.¹⁶¹ Consequently, there is no guarantee that prescribed freedoms and corresponding duties such as those implied above will be put into effect and make any difference in the management of international environmental obligations in these countries. Having said that, relevant experience in other developing parts of the world is encouraging, pointing to the conclusion that rights to environmental protection "can lie dormant until they are actively seized by environmentalists and lawyers",¹⁶² and also that, from an opposite perspective, strong environmental movements combined with an independent and sympathetic judiciary may create environmental remedies even when existing laws do not explicitly provide for them.¹⁶³ But exactly because these conditions are not always present, there is still a need for stronger international supervision in the Mediterranean, as detailed in Chapter 5.

¹⁶⁰ See D.Sharfman, *Living Without a Constitution: Civil Rights in Israel*, 1993, p.179, for a presentation of the trend towards increased environmental activities in Israel, including court petitions.

¹⁶¹ There are, however, encouraging examples of judicial application of a series of procedural rights established under international law, especially in the context of human rights, in Mediterranean countries that have been long found themselves in the midst of turbulent and unstable political circumstances, both internally and externally. One notable example is Egypt, see 'A.el-Morr, 'The Supreme Constitutional Court of Egypt and the Protection of Human and Political Rights', in Ch.Mallat (ed.), *Islam and Public Law*, 1993, pp.229-60. On the bearing of factors such as a country's culture, stage of development, and political processes on compliance with international environmental law, see E.Brown Weiss & H.Jacobson, 'Assessing the Record and Designing Strategies to Engage Countries', in E.Brown Weiss & H.K.Jacobson (eds.), *Engaging Countries - Strengthening Compliance with International Environmental Accords*, pp.529-35.

¹⁶² Anderson, *op.cit.* n.139, p.20; see also A.Fabra, 'Indigenous Peoples, Environmental Degradation and Human Rights: A Case Study', in Boyle & Anderson (eds.), *op.cit.* n.1, pp.245-63; and E.Fernandes, 'Constitutional Environmental Rights in Brazil', in *ibid.* pp.265-84.

¹⁶³ See M.R.Anderson, 'Individual Rights to Environmental Protection in India', in Boyle & Anderson (eds.), *op.cit.* n.1, pp.199-225.

CONCLUSIONS

It is now time to pull the various strands of the preceding discussion together and formulate some overall conclusions. In the previous Chapters we saw how, within the wider context of the evolution of international environmental law, international regulation for the protection of the Mediterranean Sea against pollution matured from a hortatory 'framework' to specific commitments in the context of MAP, and from a piecemeal approach to integrated pollution control in the context of the EU. The evolving legal framework covering to a lesser or greater extent any possible polluting source with often detailed and technical standards that have to be implemented domestically demonstrates the acceptance of world community interests in the control of activities carried out within exclusive state jurisdiction and in the preservation and enhancement of the quality of the marine environment within state borders irrespective of any possible transboundary effect. This 'internationalisation' of the domestic environment, has, thus, restricted the absolute sovereignty and discretion of governments with regard to the conduct allowed, and even required, in order to bring about full implementation of the respective commitments, along the lines of the developing theory of 'trust',¹ whereby states are seen as caretakers, 'trustees' of their environmental assets rather than sovereigns thereupon.

We also traced the parallel evolution of compliance control mechanisms from the state responsibility model that accommodates bilateral interests and the comprehensive institutional approach and the provision of financial and technical assistance catering for collective interests, all operating at the inter-state level, to the national law mechanism that brings to the forefront domestic actors representing public interests in the proper implementation of international environmental standards. In this context, we questioned the efficiency of the mechanisms in place today to follow up and ensure compliance in the specific case of international regulation to control marine pollution in the Mediterranean.

The absence of state practice relative to the invocation of state responsibility for breach of environmental obligation and to the use of sanctions worldwide, and especially in the Mediterranean region, has been repeatedly stressed in this study. There is nothing to indicate that the situation will change in the near future and that the fundamental tenets of these most traditional concepts will be drastically altered. In fact, this approach has innate shortcomings: It relies on the wrong actors to control compliance with international environmental standards, i.e. the states themselves, which have no incentive to take action against each other, especially when no vital state interests are

¹ See E.Brown Weiss, *In Fairness to Future Generations*, 1989; and *supra*, Chapter 2, pp.59-60.

affected. Furthermore, even in the event that collective interests find a proper place in the law of state responsibility in the future, the fact remains that this is a reactive strategy, as opposed to a preventive one, in the sense that it only becomes relevant when a violation is alleged to have already been committed. It is consequently a mechanism that can serve only as a last resort, a reminder that *pacta sunt servanda* and that this cornerstone principle may not be ignored at will.

Turning to the comprehensive institutional model, in Chapter 5 it was argued that this is the most influential treaty mechanism established to date that allows for the continuous interaction needed to follow up international standards laid down in paper so that they are put into practical effect and achieve their objectives. This mechanism brings to the forefront non-state actors, and more specifically international organs representing the common interest of the parties and, therefore, having their own dynamic as somewhat independent agents, that deal with day-to-day problems and seek to ensure refinement, implementation and ultimately compliance with the substantive rules established under their constituent treaty. This interactive process, however, is still intensely political in nature, as it relies on the willingness of each and every state-party in order to function effectively, especially when there is no well-defined arrangement for compliance control.

This is reiterated by the examination of the two principal techniques used in the treaty regimes applicable to marine pollution of the Mediterranean Sea, i.e. monitoring and reporting. These are meant to provide the indispensable feedback on both formal and practical implementation of international obligations and as such their proper execution is vital for any subsequent follow up action. However, this information is almost exclusively controlled by the state itself whose behaviour is under scrutiny. As a result, and despite extensive reporting requirements and efforts within various organs to facilitate and promote submission of reports, the required information is usually not forthcoming, or when it is, its quality and adequacy are found lacking. At the same time, the organs responsible for putting data gathered into effective use remain in most cases inactive. Transparency in the sense of efficient information-gathering is achieved only in the context of the Paris MOU; the intrinsic features of this arrangement, however, entailing administrative agencies inspecting those coming under their jurisdiction, point to the reality that in practice the major part of potentially polluting activities, not involving ships, cannot be meaningfully followed up by a system of international co-operation of this kind.

Overall, the European Union has established the most advanced and wholesome international compliance-control mechanism by endowing the Commission with the task of ensuring that Community legislation is properly implemented in Member States. This is in practice a complex process of interaction with the public through the channel of submission of complaints, as well as with competent national authorities, which can gradually culminate to the judicial stage, and even to the imposition of fines on persistent non-compliant states. The operation of this mechanism does produce results in the sense that several problems of implementation are resolved during the

informal stages, and some instances of blatant violations of Community environmental rules are reversed after an ECJ judgment is obtained. In this context, Mediterranean Member States are subject to fairly stringent supervision with regard to the application of Community law for the protection of the marine environment in their territory.

Nonetheless, this process is by no means faultless. Its most important limitations relate to the inability of the Commission services to monitor national implementation effectively, in view of the fact that monitoring and reporting requirements under environmental Directives, despite their much more sophisticated and mandatory character, are still not properly fulfilled, especially by Mediterranean countries; and to the political considerations that admittedly have a greater or lesser bearing on the decision to institute infringement proceedings against a state. Consequently, this mechanism can be only partially successful, and has to be complemented by decentralised enforcement at the national level. What is more, the Community model of compliance control cannot be extended to cover third Mediterranean countries before a process of integration comparable to that within the EU has been achieved.

There is still the possibility of developing an advanced international compliance-control arrangement outside the EU context. The operation of the Montreal Protocol 'non-compliance procedure' shows that such a permanent, streamlined mechanism, explicitly providing for sanctioning or assistance measures to address non-compliant behaviour, can make a real difference in individual states' performance. Nevertheless, even this procedure does not escape being influenced by political considerations and an excessive concern for confidentiality, which underscore the need for openness and transparency so that the parameter of public exposure can come in, and NGOs can access information gathered and be involved in the life of the international regime. Notwithstanding its shortcomings, the Montreal Protocol model has influenced and been incorporated in other international environmental regimes.

No such development is imminent in the context of MAP, however; the Parties to the Barcelona Convention are simply not concerned with compliance control, notwithstanding certain Secretariat efforts, nor have they vested their collective organ with anything more than a standard and loosely-defined supervisory power in the 1995 revision. A positive indication for a possible change of this attitude towards a long-overdue recognition of the collective interest in compliance control is the inclusion of compliance monitoring in the objectives of MED POL III. Be that as it may, MAP's twenty-year operation has undoubtedly much contributed to capacity-building and increased awareness in Mediterranean countries, which indirectly leads to more environmental regulation in conformity with international undertakings. In fact, it would be fair to say that treaty institutions work - in a characteristically preventive fashion - towards enhanced compliance even absent any distinct non-compliance procedure. The follow-up work effected in the framework of the IMO committees in relation to MARPOL is the best illustration of this point.

From another standpoint, the possibility of requiring delinquent states to pay fines, and, more generally, the Commission's authority to manage enormous funds, which can have a direct or indirect impact on Member States' compliance patterns, highlights the centrality of financial resources for compliance-control purposes. Experience with the Montreal Protocol mechanism also teaches that the acceptance and legitimisation of substantial compliance control are closely linked with the availability of a treaty mechanism for financial assistance to parties that meet their substantive and procedural obligations. More generally, international assistance, in the form of provision of financial resources, transfer of technology and technical information, and trade and other economic incentives, can also act as a direct or indirect inducement to comply with international obligations of environmental protection. It can specifically facilitate implementation of relevant standards in countries with insufficient resources but willing to comply with their international commitments, and, at the same time, may instigate measures of environmental protection by governments that are either indifferent or hesitant, but nevertheless ready to take advantage of the available aid. This is, therefore, an absolutely preventive approach since it operates before the issue of non-compliant behaviour has even arisen.

These considerations have obviously not informed the design of the Mediterranean Trust Fund, which has led to its unsuitability to support substantive measures to combat marine pollution in the region. In the same vein, the provisions of the Barcelona Convention and Protocols on financial and technical assistance to developing countries have been translated into concrete actions to a very limited extent, mostly in the area of oil spill response and monitoring capabilities. With regard to land-based pollution abatement, MAP has provided only modest amounts for the training of experts on national implementation. In this connection the GEF-funded project for mitigating marine pollution from various, including land-based, sources in the Southern Mediterranean is much more substantial and in pace with current thinking.

In the Community context, on the other hand, Mediterranean Member States have received very substantial support for the execution of environmental projects. Spain and Greece in particular have benefited during the last six years from the Cohesion Fund for the purpose of controlling industrial pollution of the marine environment and of constructing wastewater treatment facilities; more modest amounts were also directed to such investments under the ENVIREG programme. However, the Cohesion Fund has, at least in the first few years of its operation, shown some notable failings with regard to ensuring that the projects funded fully complied with Community environmental legislation and were subjected to adequate EIAs. In general, until 1992 there was no explicit conditioning of Community assistance on compliance with environmental standards, and even inconsistency of various types of funding with stated environmental objectives, notably under the Structural Funds and from the EIB. However, much progress has been made since in these respects.

As far as third Mediterranean countries are concerned, Community support has been forthcoming under the MEDSPA programme, which is significantly the first one explicitly linking Community funding to the attainment of the MAP objectives. However, aid in this context was very limited and directed exclusively to technical and administrative capacity-building. In view of the discrepancy in the level of development of appropriate national legislation for the prevention and redress of pollution between developed and developing states in the region, that kind of assistance aiming at narrowing the gap is definitely not inconsequential, but it is certainly not enough. The same can be said with regard to the LIFE instrument, the principal Community funding programme for the environment currently in operation, which also directs small amounts to capacity-building in the Southern and Eastern Mediterranean. Thus, the main source of funding for environmental projects in non-member states of the region has been the EIB and the various financial protocols between the Community and individual countries. However, this assistance has not been made conditional on compliance with international, regional or Community environmental standards.

There is every indication that the situation will change in the recently introduced stage of intra-regional co-operation in the framework of the 'Euro-Mediterranean Partnership'. The MEDA Regulation, which governs this phase, in particular refers to the EU obligation to assist developing states in addressing the environmental impacts of development. In this context, it is envisaged that harmonised legislation will be promoted, and, moreover co-operation with regional institutions such as those of the MAP system will be fostered. Raising environmental standards in third Mediterranean countries has obvious advantages also for European compliance with the respective rules and for competitiveness in a free-trade environment. It is, therefore, submitted that there is much scope for conditioning Community financial aid to non-member states on the achievement of specific international and regional targets for pollution abatement. In this connection, the repeatedly noted interaction and constructive discourse between Community and international environmental law can provide the necessary basis, in view of the fact that, although third states are certainly not yet bound by Community law, they are committed to regional standards of protection at least as far as the marine environment is concerned. Having said that, the progress achieved in this area within the EU can only be accomplished in this context to the extent the broad economic and political integration process materialises and deepens.

To sum up, more astute and extensive use of the conditional funding technique is arguably a central challenge for the future of compliance control with international marine pollution standards in the Mediterranean region; as this tool can positively influence both the intention and the capacity of concerned states to comply.² To this effect, it is useful to consider concentrating efforts towards:

² See E.Brown Weiss & H.Jacobson, 'Assessing the Record and Designing Strategies to Engage Countries', in E.Brown Weiss & H.K.Jacobson (eds.), *Engaging Countries - Strengthening Compliance with International Environmental Accords*, Cambridge, 1998, pp.538-42

- i) Ensuring that environmental projects in Member-States receiving Community assistance fully comply with relevant legislation, and stringently applying the discontinuation-of-funding clause in case of non-compliance;
- ii) Including explicit conditioning of financial aid on adherence to international and regional environmental standards in all future 'Euro-Mediterranean Association Agreements', as a first step towards an eventual harmonisation of environmental legislation; and
- iii) Endowing the MAP Secretariat with 'clearing-house' functions with regard to all available assistance mechanisms, including the EU and EIB, GEF and METAP, taking advantage of its recently expressed readiness to formally assume an advisory and supportive role in helping interested countries acquire funding for environmental projects. Such a development can conceivably pave the way for the eventual introduction of a substantial financial mechanism in the Barcelona regime, which could be either in the form of the Montreal Multilateral Fund or of an imaginative consolidation of the management of all the existing assistance schemes under a single regional institution. This could in turn be linked to some kind of compliance-control procedure as was done in the ozone regime.

That said, the international compliance-control systems considered so far are not nor are they likely to become entirely satisfactory. Although they can go a long way towards facilitating compliance and, in the sphere of Community law, towards direct enforcement action, they always depend on national governments and administration for ultimately bringing about full implementation of international environmental norms. Another common characteristic of the techniques examined is that they bring the most ardent defenders of the environment, namely concerned citizens and their associations, only marginally into play. These actors have the incentive, the intention; suffice it to give them the capacity, i.e. the practical ability and the legal authority to control compliance with environmental standards and thus take the initiative away from states and international organs that are ultimately as independent and effective as the parties of a given regime allow them to be. Both these failings can be realistically rectified through the use of domestic legal mechanisms with their array of administrative and judicial procedures for the enforcement of legal obligations in general and environmental standards in particular.

As was explained in Chapter 8, in principle the different branches of the state are under a duty to implement and enforce international rules that have duly entered into force for that state. Under the Community legal order this duty stems from the doctrine of supremacy of Community law and the accompanying principles that have been embedded in the ECJ's jurisprudence over many years. With regard to other international obligations, especially in treaty form, national Constitutions provide for their incorporation in the national legal order and their placement in the legal hierarchy of the state; once incorporated, international law must be accurately and effectively implemented or, if this not done or is done improperly, it must be enforced by the judiciary. Despite

diverse legal traditions and practice, international standards are, thus, capable of being held 'directly effective' or 'self-executing' in a national jurisdiction to the extent they are formulated in precise and clear terms, grant individual rights, and restrict state discretion as to the way they should be implemented. Thus, the national judge emerges as a crucial complement to centralised enforcement. The example of the Greek Council of State jurisprudence argues in favour of this proposition, and additionally shows that the judiciary can fill the gap of compliance control with international agreements not undertaken under the centralised enforcement mechanism of the Community.

In fact, effective implementation of Community environmental law is better guaranteed by the much closer association of the Member States' legal orders with the Community one, in view of the fact that the judiciary is under precise duties that relate to the rectification of both public and private non-compliance with Community rules. Citizens are given in this context additional avenues to challenge such practices by invoking the 'direct' or 'indirect' effect of environmental Directives, or even raising a claim of 'state liability'.

But even before a compliance issue comes before the court, the follow up needed to control what is actually taking place with regard to effective practical implementation of the said rules can realistically be pursued in a meaningful and comprehensive way only at the local level, as is evidenced by both international and Community efforts in this field. In this connection, the environmentally-sensitive sectors of the society acting as 'watchdogs' can assist competent authorities and, if need be, substitute for them. International law has a large potential for future intervention to this effect.

It is true that in the environmental sphere international regulation has not been as intrusive in the domestic procedural domain as in the area of human rights. However, the North American Agreement on Environmental Co-operation introduces state obligations to effectively enforce national environmental legislation, and even procedures for recourse to both national and international institutions to redress state failures related to enforcement. This is a clear indication that the method and effectiveness of environmental enforcement within state borders are a legitimate international concern, and, in fact, a corollary of international regulation of the domestic environment. As Professor Kiss puts it: "Clearly, the most powerful - or the least weak - tool for ensuring compliance with international environmental obligations is public awareness and the will to impose upon governments the protection of the environmental values which are essential for the survival of humanity".³

Be that as it may, only recently has international environmental law shifted its focus on establishing citizen rights that acknowledge public interests in its subject-matter. Community law has been in the vanguard of relevant developments that bring the public into the law-making and

³ A-Ch.Kiss, 'Compliance with International and European Environmental Obligations', 9 *Hague YB. of Int'l L.*, 1996, p.54.

law-enforcement process. The right to participate in compulsory EIA procedures, especially when the marine environment is likely to be affected, is the most widely accepted principle in this connection; while the right of access to environmental information is being slowly entrenched, mainly in the Western world. However, the application of these principles meets with considerable obstacles; the fact that the EIA Directive attracts the majority of complaints every year is characteristic of the resistance of public authorities to be constrained by procedural requirements that change the usual course of business. Most importantly, neither international nor Community environmental law has yet paid enough attention to the need for uniform minimum rules on standing that would enable concerned individuals and their associations to take up the task of enforcing environmental standards in particular. With the notable exception of the Aarhus Convention which, however, has not yet become operative, rights of access to administrative and judicial proceedings still to date remain under the exclusively control of individual states, save in the area of transboundary pollution damage.

However, the harmonisation of civil liability rules in general in relation to transboundary activities and especially shipping, despite its long history and ensuing legitimisation, is today only marginally relevant to compliance control as such. In fact, as explained in Chapter 4, the practice is still rather conservative when it comes to compensating damage to the environment *per se*. That is notwithstanding the fact that the threat of being subject to strict and uniform liability standards has a considerable deterrent impact on prospective violators of environmental rules in general to the extent their behaviour will cause some appreciable damage. That aside, the Dangerous Activities Convention indicates a trend towards establishing common liability rules for environmental harm that occurs exclusively within national borders, which, together with the recent emergence of a trend in favour of compensation for pure environmental loss and the development of relevant techniques within national legal systems, points to a potential transformation of the civil liability mechanism into a tool of enforcement against private polluters and possibly against the state itself. A relaxation of the relevant requirements could strengthen the case for interest groups challenging environmentally destructive actions not only on the basis of illegality, but, where appropriate, on the grounds that these activities have caused pure ecological injury. This would be a significant addition to the array of procedural standards operating within national jurisdictions.

That said, in the specific context of MAP even the more modest efforts to develop a regional system of liability and to set up an Interstate Guarantee Fund have met with seemingly unsurmountable reluctance for twenty years now. Similar difficulties are noted in relation to the Commission's attempts to establish common environmental liability standards across the EU. If these eventually produce some results, the way is paved for an expansion of the relevant rules in the rest of the Mediterranean region, either through a legal harmonisation process under the 'Euro-

Mediterranean partnership', or at least through Mediterranean participation in the regime established pursuant to the Dangerous Activities Convention.

More generally, one must always bear in mind that the development of mechanisms that decisively interfere with the reserved domain of national procedural law is easier to achieve in the context of political and economic integration systems, such as the EU and NAFTA, and much more difficult in a looser co-operative environment like the Barcelona regime. It follows that a comparable evolution is possible in the regional Mediterranean context only through the envisaged integration process. If this setting matures, one can imagine that procedural requirements will be eventually encompassed in the wider 'export' of environmental conditions from the Community to third countries in the region. Even that would not be enough, however: Procedural guarantees might be just a theoretical notion in countries where democratic institutions are lagging behind. Hence, it is not guaranteed that relevant rights and corresponding duties, even if they are formally introduced, would be put into effect and make any difference in the management of international environmental obligations in these countries. For that to happen there are several preconditions that have to be fulfilled, including substantial democratic accountability, existence of active environmental NGOs and the ensuing enhanced public awareness.

With these caveats in mind, it is nevertheless worth considering in the development of future international regulation:

- i) The establishment of more detailed, technical and complete rules, with more specific instructions as to what is required for their implementation, which will be easier to be considered directly applicable;
- ii) the establishment of minimum environmental liability rules at the Community level with a broad definition of damage to the environment and provision for public standing in order to present relevant claims;
- iii) the establishment of minimum rights for public access to justice and to administrative proceedings for environmental matters at the Community level;
- iv) the adoption of a regional instrument, for instance in the form of a Barcelona Convention Protocol, laying down environmental liability standards applicable in the whole region;
- v) the endorsement of procedural principles in the vein of the Aarhus Convention and the respective Community instruments for the whole of the Mediterranean area, either by means of a separate Protocol in the MAP context or through accession of the non-European Mediterranean states to the Aarhus treaty; and, finally,
- vi) the establishment of a network of national environmental enforcement authorities in the Mediterranean along the lines of IMPEL for the exchange of information and expertise and the production of common approaches and guidelines in relation to enforcement problems.

Thus reinforced, the national law model, despite its *prima facie* reactive character, can ultimately become preventive. In other words, although this approach basically provides a response in case international environmental obligations are not given proper regard in domestic jurisdictions, if it becomes comprehensive enough and regularly practised, it can also play a significant deterrent role and arrest deviating behaviour before it occurs by way of the fear of being detected and sanctioned.

It should also be said that the two lines of future positive developments analysed above are complementary: In the short and medium term, the institutional approach is more susceptible to modification, because it is already well-established and can be functionally altered to accommodate the above-described adjustments with no excess difficulty. Development of the national law model for compliance control, on the other hand, is a long-term challenge, in view of the fact that states are initially required to transcend traditional perceptions of what the limits of international law are and subsequently to tolerate deep internal changes that do not depend so much on international regulation but rather on environmental awareness and democratic processes within each state.

All said, it must be obvious by now that the topic of this study has never before been thoroughly researched. What is more, the actual thesis views compliance control issues from a perspective not common in international legal thinking, inasmuch as the national and international legal systems are perceived to have a much greater affinity than usual, so that the discussion on implementation of and compliance with international environmental law addresses factors, actions and procedures operating under domestic legal orders. It follows that the foregoing inferences can only be tentative.

However, the line of reasoning pursued in the present context is not exclusively related to the international law on the protection of the Mediterranean sea against pollution. In fact, although the area of marine pollution regulation is one of the most technical and detailed, and thus susceptible to advanced compliance control, we noted that the mechanisms that accommodate the multilateral interest are even more mature in other areas of international law such as the ozone regime. Moreover, the - arguably - most advanced stages of compliance control with international law intruding into the domestic legal sphere have no direct relation to marine pollution, i.e. to the sector regulated, but are rather procedural in nature. The study of the Mediterranean Sea case is also typical of a regime involving both developed and developing nations with all the ensuing problems and tensions. Therefore, it is submitted that the conclusions reached can have some considerable relevance to other areas of international environmental law. This makes specific research and case studies in other environmental sectors and regimes necessary in order to trace the stage of development and the effectiveness of compliance control mechanisms therein and validate, qualify or reject the thesis argued in this study. To this effect, other useful areas of future research may include individual state compliance with international environmental obligations, as well as the

impact of procedural public rights on compliance control with international environmental commitments in particular jurisdictions. The list cannot be easily exhausted, since the issue of compliance is both vital and very complex. Behind us may be a long line of achievements, but in front there is undoubtedly an uphill road to consequential implementation of international environmental standards.

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1909

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1921

Agreement between the Kingdom of Italy and that of Serbs, Croats and Slovenes regarding the Regulation of Fishing in the Adriatic, Brioni, 14 September 1921; *L.N.T.S.*, vol.XIX, p.14.

1923

Convention for the Preservation of Halibut Fisheries of the Northern Pacific Ocean, Washington, 2 March 1923; *L.N.T.S.*, vol.XXXII, p.93.

1945

Charter of the United Nations (UN Charter), San Francisco, 26 June 1945, in force 24 October 1945; 39 *A.J.I.L. Suppl.*, 1945, p.190.

1951

Treaty Establishing the European Coal and Steel Community (ECSC Treaty), Paris, 18 April 1951, in force 23 July 1952; 261 *U.N.T.S.*, p.140.

1952

International Convention for the High Seas Fisheries of the North Pacific Ocean, Tokyo, 9 May 1952; 205 *U.N.T.S.*, p.65; as amended by 1978 Protocol, in force 15 February 1979.

1954

International Convention for the Prevention of Pollution of the Sea by Oil (OILPOL), London, 12 May 1954, in force 26 July 1958; 327 *U.N.T.S.*, p.3; as amended in 1962; 600 *U.N.T.S.*, p.332; in 1969; *U.K.T.S.*, 1978, p.21; and in 1971; *R.&S.*, Vol.1, p.379.

1957

Treaty Establishing the European Economic Community (as amended in 1986 and 1992, EC Treaty), Rome, 25 March 1957, in force 1 January 1958; 298 *U.N.T.S.*, p.11.

International Convention relating to the Limitation of Liability of Owners of Sea-Going Ships, Brussels, 10 October 1957, in force 31 May 1968; *U.K.T.S.*, 1968, No.52. [see also 1976 Convention]

1958

Convention on the Territorial Sea and Contiguous Zone, Geneva, 29 April 1958, in force 10 September 1964; 516 *U.N.T.S.*, p.205.

Convention on the High Seas, Geneva, 29 April 1958, in force 30 September 1962; 450 *U.N.T.S.*, p.82.

Convention on Fishing and Conservation of the Living Resources of the High Seas, Geneva, 28 April 1958, in force 20 March 1966; 559 *U.N.T.S.*, p.285

1959

Antarctic Treaty, Washington, 1 December 1959, in force 23 June 1961; 402 *U.N.T.S.*, p.71.

1960

Convention on Third Party Liability in the Field of Nuclear Energy, Paris, 29 July 1960, in force 1 April 1968; 956 *U.N.T.S.*, p.251; as amended in 1964, in force 1 April 1968, *U.K.T.S.*, 1968, p.69; and in 1982, in force 7 October 1988, *U.K.T.S.*, 1989.

1963

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1964

Finland-USSR Agreement concerning Frontier Watercourses, Helsinki, 24 April 1964, in force 6 May 1965; *R.&S.*, Vol.X, p.5076.

1966

International Convention on Load Lines, London, 5 April 1966, in force 21 July 1968; 640 *U.N.T.S.*, p.133; as amended by 1988 Protocol, in force 3 February 2000.

International Covenant on Civil and Political Rights, 16 December 1966, in force 23 March 1976; 6 *I.L.M.*, 1967, p.368.

1967

Agreement between Denmark, Finland, Norway and Sweden concerning Co-operation to Ensure Compliance with the Regulations for Preventing Pollution of the Sea by Oil, Copenhagen, 8 December 1967, in force 8 January 1968; 620 *U.N.T.S.*, p.226.

1968

African Convention on the Conservation of Nature and Natural Resources, Algiers, 15 September 1968, in force 16 June 1969; 1001 *U.N.T.S.*, p.4.

Convention on Jurisdiction and Enforcement of Judgments in Civil and Commercial Matters, Brussels, 27 September 1968, in force 1 February 1973; 8 *I.L.M.*, 1969, p.229.

1969

Tanker Owners Voluntary Agreement concerning Liability for Oil Pollution (TOVALOP), 7 January 1969; 8 *I.L.M.*, 1969, p.497.

Convention on the Law of Treaties (Vienna Convention), Vienna, 23 May 1969, in force 27 January 1980; 8 *I.L.M.*, 1969, p.679.

Agreement for Co-operation in Dealing with Pollution of the North Sea by Oil and Other Harmful Substances, Bonn, 9 June 1969, in force 9 August 1969; 704 *U.N.T.S.*, p.3; as amended by 1983 Agreement, in force 1 September 1989; *Misc.*26, 1983, *Cmnd.*9104.

International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Damage (1969 Intervention Convention), Brussels, 29 November 1969, in force 6 May 1975; 9 *I.L.M.*, 1970, p.25 .

International Convention on Civil Liability for Oil Pollution Damage (CLC), Brussels, 29 November 1969, in force 8 April 1981; 973 *U.N.T.S.*, p.3; as amended by 1976 Protocol, in force 8 April 1981; 16 *I.L.M.*, 1977, p.617; 1984 Protocol, not in force; and 1992 Protocol, in force 30 May 1996.

1971

Convention on Wetlands of International Importance Especially as Waterfowl Habitat, (Ramsar Convention), Ramsar, 2 February 1971, in force 21 December 1975; 996 *U.N.T.S.*, p.245; as amended by 1982 Protocol, in force 1 October 1986; 22 *I.L.M.*, 1983, p.698; and 1987 amendments, in force 1 May 1994.

Contract Regarding a Supplement to Tanker Liability for Oil Pollution (CRISTAL), 14 January 1971; 10 *I.L.M.*, 1971, p.137.

International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Fund Convention), Brussels, 18 December 1971, in force 16 October 1978; 11 *I.L.M.*, 1972, p.284; as amended in 1976, in force 22 November 1994; 16 *I.L.M.*, 1977, p.621; by 1984 Protocol, not in force; and 1992 Protocol, in force 30 May 1996.

Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material, Brussels, 17 December 1971, in force 15 July 1975; *Misc.*39, 1972, *Cmnd.*5094.

Agreement between Denmark, Finland, Norway and Sweden Concerning Co-operation in Taking Measures against Pollution of the Sea by Oil, Copenhagen, 16 September 1971, in force 16 October 1971; *R.&S.*, Vol.II, p.502.

1972

- Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft (1972 Oslo Dumping Convention), Oslo, 15 February 1972, in force 7 April 1974; 932 *U.N.T.S.*, p.3.
- Convention on International Liability for Damage Caused by Space Objects (Space Objects Liability Convention), London/ Moscow/ Washington, 29 March 1972, in force 1 September 1972; 961 *U.N.T.S.*, p.187.
- Convention on the International Regulations for Preventing Collisions at Sea (COLREG), London, 20 October 1972, in force 15 July 1977; *U.K.T.S.*, 1977, p.77
- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention), London/Mexico City/Moscow/Washington, 29 December 1972, in force 30 August 1975; 1046 *U.N.T.S.*, p.120; as amended in 1978, in force 11 March 1979; 18 *I.L.M.*, 1979, p.510; in 1980, in force 11 March 1981; in 1985, in force 11 May 1990; and in 1996 Protocol, not in force; IMO Doc.LC/SM 1/6.

1973

- Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), Washington, 3 March 1973, in force 1 July 1975; 993 *U.N.T.S.*, p.243; as amended in 1979, in force 13 April 1987.
- International Convention for the Prevention of Pollution from Ships (MARPOL), London, 2 November 1973, 12 *I.L.M.*, 1973, p.1319; as amended by 1978 Protocol before entry into force, in force 2 October 1983; 17 *I.L.M.*, 1978, p.246; and a series of subsequent amendments (1984, 1985, 1987, 1989, 1990, 1991, and 1992).
- Protocol relating to Intervention on the High Seas in Cases of Marine Pollution by Substances Other than Oil (1973 Intervention Protocol), London, 2 November 1973, in force 30 March 1983; *U.N.T.S.*, 1983, p.27.

1974

- Agreement between Italy and Yugoslavia on Co-operation for the Protection of the Waters of the Adriatic Sea and Coastal Zones from Pollution, Belgrade, 14 February 1974, in force 20 April 1977; *R.&S.*, Vol.XIX, p.9484.
- Nordic Convention on the Protection of the Environment (1974 Nordic Convention), Stockholm, 19 February 1974, in force 5 October 1976; 13 *I.L.M.*, 1974, p.511.
- Convention on the Protection of the Marine Environment of the Baltic Sea Area (1974 Helsinki Convention), Helsinki, 22 March 1974, in force 3 May 1980; 13 *I.L.M.*, 1974, p.546.
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1977

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1978

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1979

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1980

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1981

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1982

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1983

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1984

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1985

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1986

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1987

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1988

Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA), Wellington, 2 June 1988, not in force; 27 *I.L.M.*, 1988, p.868.

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1989

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1990

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1991

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1992

Treaty on European Union (Maastricht Treaty), Maastricht, 17 February 1992, in force 1 November 1993; 31 *I.L.M.*, 1992, p.247.

Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1992 ECE Transboundary Watercourses Convention), Helsinki, 17 March 1992, in force 6 October 1996, 31 *I.L.M.*, 1992, p.1312.

Convention on the Protection of the Marine Environment of the Baltic Sea Area (1992 Helsinki Convention), Helsinki, 9 April 1992, in force 17 January 2000; *I.E.L.-M.T.*, 1992:28.

Convention on the Protection of the Black Sea against Pollution, Bucharest, 21 April 1992, in force 15 January 1994; 32 *I.L.M.*, 1992, p.1101.

Agreement on the European Economic Area, Oporto, 2 May 1992, in force 1 January 1994; 1994 *O.J. (L 1)* 494.

United Nations Framework Convention on Climate Change (Climate Change Convention), New York, 9 May 1992, in force 24 May 1994; 31 *I.L.M.*, 1992, p.849.

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1993

Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (Dangerous Activities Convention), Lugano, 21 June 1993, not in force; 32 *I.L.M.*, 1993, p.1228.

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1994

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1996

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1997

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Memorandum of Understanding on Port State Control in the Mediterranean Region (Mediterranean MOU), Valletta, 11 July 1997.

1998

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Council Regulation 1762/92 on the implementation of the protocols on financial and technical co-operation concluded by the Community with Mediterranean non-member countries, 1992 *O.J.* (L 181)1.

Council Regulation 1763/92 concerning financial co-operation in respect of all Mediterranean non-member countries, 1992 *O.J.* (L 181) 5.

Council Regulation 1973/92 establishing a Financial Instrument for the Environment (LIFE), 1992 *O.J.* (L 206) 1; as amended by Council Regulation 1404/96, 1996 *O.J.* (L 181) 1; and Council Regulation 1655/2000, 2000 *O.J.* (L 192) 1..

Council Regulation 259/93 on the supervision and control of shipments of waste within, into and out of the European Union, 1993 *O.J.* (L 30) 1; as amended by Commission Decision 94/721, 1994 *O.J.* (L 288) 36, Commission Decision 96/660, 1996 *O.J.* (L 304) 15;

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monitoring of environments affected by waste from the titanium dioxide industry, 1982 *O.J.* (L 378) 1; and amended by Council Directive 83/29, 1983 *O.J.* (L 32) 28; and Council Directive 89/428, 1989 *O.J.* (L 201) 56; and repealed by Council Directive 92/112, 1992 *O.J.* (L 409) 11, on procedures for harmonizing the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry.

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Council Directive 85/203 on air quality standards for nitrogen dioxide, 1985 *O.J.* (L 87) 1; as amended by Council Directive 85/580, 1985 *O.J.* (L 372) 36.

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88/347 with regard to aldrin, dieldrin, endrin, isodrin, hexachlorobenzene, hexachlorobutadiene and chloroform, 1988 *O.J.* (L 158) 35; and Council Directive 90/415 with regard to dichloroethane, trichloroethylene, perchloroethylene and trichlorobenzene, 1990 *O.J.* (L 219) 49..

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Council Directive 91/676 concerning the protection of waters against pollution caused by nitrates from agricultural sources, 1991 *O.J.* (L 375) 1.

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Council Directive 93/75 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods, 1993 *O.J.* (L 247) 19; as amended by Council Directive 98/55, 1998 *O.J.* (L 215) 65.

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Council Directive 96/61 concerning integrated pollution prevention and control, 1996 *O.J.* (L 257) 26.

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- Council Decision 81/971 establishing a Community information system for the control and reduction of pollution caused by hydrocarbons at sea, 1981 *O.J.* (L 355) 54; as amended by Council Decision 86/85 on the establishment of a Community information system for the control and reduction of pollution caused by oil spillages of hydrocarbons and other harmful substances discharged at sea or in inland waterways, 1986 *O.J.* (L 77) 33; and Council Decision 88/346, 1988 *O.J.* (L 158) 32.
- Council Decision 81/462 on the conclusion of the Convention on long-range transboundary air pollution, 1981 *O.J.* (L 171) 11.
- Council Decision 82/72 concerning the conclusion of the Convention on the Conservation of European Wildlife and Natural Habitats, 1982 *O.J.* (L 38) 3.
- Council Decision 83/101 concluding the Protocol for the protection of the Mediterranean Sea against pollution from land-based sources, 1983 *O.J.* (L 67) 1.
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- Council Decision 85/338 on the adoption of the Commission work programme concerning an experimental project for gathering, co-ordinating and ensuring the consistency of information on the state of the environment and natural resources in the Community, 1985 *O.J.* (L 176) 14; as amended by Council Decision 90/150, 1990 *O.J.* (L 81) 38.
- Council Decision 93/98 on the conclusion on behalf of the Community of the Convention on the control of transboundary movements of hazardous wastes and their disposal (Basel Convention), 1993 *O.J.* (L 14) 16.
- Council Decision 93/626 concerning the conclusion of the Convention on Biological Diversity, 1993 *O.J.* (L 309) 3.
- Council Decision 93/731/EC on public access to Council documents, 1993 *O.J.* (L 340) 43.
- Council Decision 94/69 concerning the conclusion of the United Nations Framework Convention on Climate Change, 1994 *O.J.* (L 33) 13.
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- Commission Decision 92/446 concerning questionnaires relating to Directives in the water sector, 1992 *O.J.* (L 247) 10.
- Commission Decision 93/481 concerning formats for the presentation of national programmes as foreseen by Dir.91/271, Art.17, 1993 *O.J.* (L 226) 23.

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4. Agreements with Third Mediterranean Countries.

1980 Co-operation Agreement between the European Economic Community and the Federal Republic of Yugoslavia, 1983 *O.J.* (L 41) 2.

1989 Protocol on Financial and Technical Co-operation between the European Economic Community and Malta, 1989 *O.J.* (L 180) 47.

1990 Agreement between the European Economic Community and the People's Republic of Bulgaria on Trade and Commercial and Economic Co-operation, 1990 *O.J.* (L 291) 9.

1991 Protocol on Financial and Technical Co-operation between the European Economic Community and the Republic of Tunisia, 1992 *O.J.* (L 18) 35.

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1973

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1974

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1977

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1978

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1979

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1980

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1981

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1982

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1983

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1984

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1985

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1986

Single European Act, Luxembourg, 17 February 1986/The Hague, 28 February 1986, in force 1 July 1987; 25 *I.L.M.*, 1986, p.506.

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1987

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1988

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1989

Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (Basel Convention), Basel, 22 March 1989, in force 5 May 1992; 28 *I.L.M.*, 1989, p.657; as amended in 1995, not in force.

International Convention on Salvage, London, 28 April 1989, in force 14 July 1996; IMO/LEG/CONF.7/27, 1989.

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1990

Protocol Concerning Specially Protected Areas and Wildlife in the Wider Caribbean Region (Wider Caribbean Specially Protected Areas Protocol), Kingston, 18 January 1990, not in force;
1 *Y.B.I.E.L.*, 1990, p.447.

International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention), London, 30 November 1990, in force 13 May 1995; 30 *I.L.M.*, 1991, p.735.

1991

Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (Bamako Convention), Bamako, 29 January 1991, in force 22 April 1998; 30 *I.L.M.*, 1991, p.775.

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1992

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Convention on the Protection of the Marine Environment of the Baltic Sea Area (1992 Helsinki Convention), Helsinki, 9 April 1992, in force 17 January 2000; *I.E.L.-M.T.*, 1992:28 .

Convention on the Protection of the Black Sea against Pollution, Bucharest, 21 April 1992, in force 15 January 1994; 32 *I.L.M.*, 1992, p.1101.

Agreement on the European Economic Area, Oporto, 2 May 1992, in force 1 January 1994; 1994 *O.J.* (L 1) 494.

United Nations Framework Convention on Climate Change (Climate Change Convention), New York, 9 May 1992, in force 24 May 1994; 31 *I.L.M.*, 1992, p.849.

Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993; 31 *I.L.M.*, 1992, p.822.

Convention for the Protection of the Marine Environment of the North-East Atlantic (1992 Paris Convention), Paris, 22 September 1992, in force 25 March 1998; 32 *I.L.M.*, 1993, p.1068.

North American Free Trade Agreement (NAFTA), Washington/Ottawa/Mexico City, 17 December 1992, in force 1 January 1994; 32 *I.L.M.*, 1993, pp.289 and 605.

1993

Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (Dangerous Activities Convention), Lugano, 21 June 1993, not in force; 32 *I.L.M.*, 1993, p.1228.

North American Agreement on Environmental Co-operation (NAAEC), Washington/ Ottawa/ Mexico City, 8, 9, 12, and 14 September 1993, in force 1 January 1994; 32 *I.L.M.*, 1993, p.1480.

1994

Protocol to the Convention on Long-Range Transboundary Air Pollution on Further Reduction of Sulphur Emissions (1994 Sulphur Protocol), Oslo, 14 June 1994, in force 5 August 1998; 5 *Y.B.I.E.L.*, 1994, p.743 .

Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (Offshore Protocol), Madrid, 14 October 1994, not in force; UNEP(OCA)/MED/IG 4/4, 14 October 1994.

1996

Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal (Hazardous Wastes Protocol), Izmir, 1 October 1996, not in force; UNEP(OCA)/MED IG.9/4, 11 October 1996.

Convention on Liability and Compensation for damage in Connection with the Carriage of Hazardous and Noxious Substances at Sea (HNS Convention), London, 3 May 1996, not in force; IMO/LEG/CONF.10/DC.4, 2 May 1996 .

1997

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Memorandum of Understanding on Port State Control in the Mediterranean Region (Mediterranean MOU), Valletta, 11 July 1997.

1998

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B. European Union Legislation.

1. Regulations.

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Council Regulation 3626/82 on the implementation in the Community of the Convention on international trade in endangered species of wild fauna and flora, 1982 *O.J.* (L 384) 1; as amended.

Council Regulation 2088/85 concerning the Integrated Mediterranean Programmes, 1985 *O.J.* (L 13) 20.

Council Regulation 2241/87 establishing certain control measures for fishing activities, 1987 *O.J.* (L 207) 1.

Council Regulation 2052/88 on the tasks of the Structural Funds and their effectiveness and on the co-ordination of their activities between themselves and with the co-operation of the European Investment Bank and the other existing financial institutions, 1988 *O.J.* (L 185) 9; as amended by Council Regulations 2081-2085/93, 1993 *O.J.* (L 193) 5..

Council Regulations 4253-4256/88 laying down provisions for implementation of Dir.2052/88 as regards co-ordination of the activities of the different Structural Funds between themselves and with the co-operation of the European Investment Bank and other existing financial institutions, 1988 *O.J.* (L 374) 1; as amended.

Council Regulation 1210/90 on the establishment of the European Environment Agency and the European environmental information and observation network, 1990 *O.J.* (L 120) 1; as amended by Regulation 933/1999, 1999 *O.J.* (L 117) 1.

Council Regulation 563/91 on action by the Community for the protection of the environment in the Mediterranean region (MEDSPA), 1991 *O.J.* (L 63) 1.

Council Regulation 1762/92 on the implementation of the protocols on financial and technical co-operation concluded by the Community with Mediterranean non-member countries, 1992 *O.J.* (L 181) 1.

Council Regulation 1763/92 concerning financial co-operation in respect of all Mediterranean non-member countries, 1992 *O.J.* (L 181) 5.

Council Regulation 1973/92 establishing a Financial Instrument for the Environment (LIFE), 1992 *O.J.* (L 206) 1; as amended by Council Regulation 1404/96, 1996 *O.J.* (L 181) 1; and Council Regulation 1655/2000, 2000 *O.J.* (L 192) 1..

Council Regulation 259/93 on the supervision and control of shipments of waste within, into and out of the European Union, 1993 *O.J.* (L 30) 1; as amended by Commission Decision 94/721, 1994 *O.J.* (L 288) 36, Commission Decision 96/660, 1996 *O.J.* (L 304) 15;

Council Regulation 120/97, 1997 *O.J.* (L 22) 14; and Council Decision 99/816, 1999 *O.J.* (L 316) 45.

Council Regulation 792/93 establishing a Cohesion Financial Instrument, 1993 *O.J.* (L 79) 74; as extended by Council Regulation 566/94, 1994 *O.J.* (L 72) 1; and repealed by Council Regulation 1164/94 establishing a Cohesion Fund, 1994 *O.J.* (L 130) 1; as amended by Council Regulations 1264 and 1265/1999, 1999 *O.J.* (L 161) 57 and 62.

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